

R23. Administrative Services, Facilities Construction and Management.

R23-1. Procurement Rules with Numbering Related to the Procurement Code.

R23-1-101. Scope of the Rules and Compliance by Using Agencies.

(1) Rule R23-1 applies to procurements by the Division of Facilities Construction and Management. This includes the procurement of construction, architects, engineers, design services and all other professional services and procurements related to design or construction by the Division of Facilities Construction and Management as well as other procurement items within the rule authorization of the Division of Facilities Construction and Management. Using Agencies are required to comply with these rules to extent required by the Utah Code.

(2) The statutory provisions governing the procurement referred to in R23-1-101(1) above are provided in the Utah Procurement Code, Title 63G, Chapter 6a of the Utah Code as well as Title 63A, Chapter 5 of the Utah Code.

R23-1-102. Definitions.

Terms used in this R23-1 are defined in Sections 63G-6a-103 and 104 of the Utah Procurement Code. In addition:

(1) "Actual Costs" means direct and indirect costs which have been incurred for services rendered, supplies delivered, or construction built, as distinguished from allowable costs.

(2) "Adequate Price" Competition means:

(a) when a minimum of two competitive bids, proposals, or quotes are received from responsive bidders or offerors.

(3) "Acquiring Agency" is a conducting procurement unit subject to Section 63F-1-205 acquiring new technology or technology as therein defined.

(4) "Bid Bond" is an insurance agreement, accompanied by a monetary commitment, by which a third party (the Surety) accepts liability and guarantees that the bidder will not withdraw the bid. The bidder will furnish bonds in the required amount and if the contract is awarded to the bonded bidder, the bidder will accept the contract as bid, or else the surety will pay a specific amount.

(5) "Bid Rigging" means agreement among potential competitors to manipulate the competitive bidding process, for example, by agreeing not to bid, to bid a specific price, to rotate bidding, or to give kickbacks.

(6) "Bid Security" means the deposit of cash, certified check, cashier's check, bank draft, money order, or bid bond submitted with a bid and serving to guarantee to the owner that the bidder, if awarded the contract, will execute such contract in accordance with the bidding requirements and the contract documents.

(7) "Board" means the State Building Board established pursuant to Section 63A-5-101.

(8) "Brand Name or Equal Specification" means a specification which uses a brand name specification to describe the standard of quality, performance, and other characteristics being solicited, and which invites the submission of equivalent products.

(9) "Brand Name Specification" means a specification identifying one or more products by manufacturer name, product name, unique product identification number, product description, SKU or catalogue number.

(10) "Collusion" means when two or more persons act together to achieve a fraudulent or unlawful act. Collusion inhibits free and open competition in violation of law.

(11) "Cost Analysis" means the evaluation of cost data for the purpose of arriving at estimates of costs to be incurred, prices to be paid, costs to be reimbursed, or costs actually incurred.

(12) "Cost Data" means factual information concerning

the cost of labor, material, overhead, and other cost elements which are expected to be incurred or which have been actually incurred by the contractor in performing the contract.

(13) "Cronyism" is an anticompetitive practice that may violate federal and state antitrust and procurement laws. Cronyism in government contracting is a form of favoritism where contracts are awarded on the basis of friendships, associations or political connections instead of fair and open competition.

(14) "Director" means the Director of the Division, including, unless otherwise stated, the Director's duly authorized designee.

(15) "Division" means the Division of Facilities Construction and Management established pursuant to Section 63A-5-201.

(16) "Mandatory Requirement" means a condition set out in the specifications/statement of work that must be met without exception.

(17) "Minor Irregularity" is a variation from the solicitation that does not affect the price of the bid, offer, or contract or does not give a bidder/offeror an advantage or benefit not shared by other bidders/offerors, or does not adversely impact the interests of the procurement unit.

(18) "New Technology" means any invention, discovery, improvement, or innovation, that was not available to the acquiring agency on the effective date of the contract, whether or not patentable, including, but not limited to, new processes, emerging technology, machines, and improvements to, or new applications of, existing processes, machines, manufactures and software. Also included are new computer programs, and improvements to, or new applications of, existing computer programs, whether or not copyrightable and any new process, machine, including software, and improvements to, or new applications of, existing processes, machines, manufactures and software.

(19) "Participating Addendum" means an agreement issued in conjunction with a Cooperative Contract that authorizes a public entity to use the Cooperative Contract.

(20) "Payment Bond" is a bond that guarantees payment for labor and materials expended on the contract.

(21) "Price Analysis" means the evaluation of price data without analysis of the separate cost components and profit.

(22) "Price Data" means factual information concerning prices for procurement items.

(23) "Record" shall have the meaning defined in Section 63G-2-103 of the Government Records Access and Management Act (GRAMA).

(24) "Section and Subsection" refers to the Utah Code.

(25) "Solicitations," in addition to the definition in 63G-6a-103 (48) also includes all documents, whether attached or incorporated by reference to the solicitation.

(26) "Surety bond" (performance bond) means a promise to pay one the obligee (owner) a certain amount if the principal (contractor) fails to meet some obligation, such as fulfilling the terms of a contract. The surety bond protects the obligee (owner) against losses resulting from the principal's failure to meet the obligation. In the event that the obligations are not met, the obligee (owner), will recover its losses via the bond.

(27) "Technology" means any type of technology defined in Section 63F-1-102(8).

(28) "Using Agency" means any state agency or any political subdivision of the state which utilizes the services procured under this Rule 23-1.

R23-1-103. Division is Issuing and Conducting Procurement Unit.

The Division is both the issuing and conducting procurement unit for procurements under this Rule R23-1.

R23-1-201. Director Appoint to Policy Board, Building Board Rules Authority.

(1) The Director shall appoint a representative to serve on the Utah State Procurement Policy Board.

(2) In accordance with Section 63G-6a-204(2), the Board rules governing procurement of construction, architect-engineer services, and leases apply to the procurement of construction, architect-engineer services, and leases of real property by the Division.

R23-1-301. Relationship with the Division of Purchasing and General Services.

(1) The Division recognizes the provisions of Part 3 of the Utah Procurement Code regarding the Chief Procurement Officer. The Division may participate as needed or required with trainings provided by the Division of Purchasing and General Services.

(2) The Director's responsibilities are provided in Title 63a, Chapter 5 of the Utah Code.

R23-1-401. Prequalification of Potential Vendors.

General procurement provisions, including prequalification of potential vendors, approved vendor lists, and small purchases shall be conducted in accordance with the requirements set forth in Sections 63G-6a-402 through 408. All definitions in the Utah Procurement Code shall apply to this Rule R23-1-4-4 unless otherwise specified in Rule 23-1. This Rule R23-4 provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

R23-1-402. Thresholds for Approved Vendor Lists.

(1) Public entities may establish approved vendor lists in accordance with the requirements of Sections 63G-6a-403 and 63G-6a-404.

(a) Contracts or purchases from an approved vendor list may not exceed the following thresholds:

(i) Construction Projects: \$2,500,000 per contract, for direct construction costs, including design and allowable furniture or equipment costs, awarded using an invitation for bids or a request for proposals;

(ii) Professional and General Services, including architectural and engineering services: \$100,000; and

(b) Thresholds for other approved vendor lists may be established by the Director.

R23-1-403. Specifications.

(1) Solicitation documents shall include specifications for the procurement item(s).

(2) Specifications shall be drafted with the objective of clearly describing the Division's requirements and encouraging competition.

(a) Specifications shall emphasize the functional or performance criteria necessary to meet the needs of the Division.

(3) Persons with a conflict of interest, or who anticipate responding to the proposal for which the specifications are written, may not participate in writing specifications. The Division may retain the services of a person to assist in writing specifications, scopes of work, requirements, qualifications, or other components of a solicitation. However the person assisting in writing specifications shall not, at any time during the procurement process, be employed in any capacity by, nor have an ownership interest in, an individual, public or private corporation, governmental entity, partnership, or unincorporated association bidding on or submitting a proposal in response to the solicitation.

(a) This Rule R23-1-403(3) does not apply to the following:

(i) a design build construction project;

(ii) provisions in specifications provided by the designer when the source of the specification is identified and it is not designed to be an impermissible sole source (a sole source that does not comply with the Utah Procurement Code and the applicable administrative rules); and

(iii) other procurements determined in writing by the Director.

(b) Violations of this Rule R23-1-403(3) may result in:

(i) the bidder or offeror being declared ineligible for award of the contract;

(ii) the solicitation being canceled;

(iii) termination of an awarded contract; or

(iv) any other action determined to be appropriate by the Director.

(4) Brand Name or Equal Specifications.

(a) Brand name or equal specifications may be used when:

(i) "or equivalent" reference is included in the specification; and,

(ii) as many other brand names as practicable are also included in the specification.

(b) Brand name or equal specifications shall include a description of the particular design and functional or performance characteristics which are required. Specifications unique to the brands shall be described in sufficient detail that another person can respond with an equivalent brand.

(c) When a manufacturer's specification is used in a solicitation, the solicitation shall state the minimum acceptable requirements of an equivalent. When practicable, the Division shall name at least three manufacturer's specifications.

(5) Brand Name Sole Source Requirements.

(a) If only one brand can meet the requirement, the Division shall conduct the procurement in accordance with 63G-6a-802 and shall solicit from as many providers of the brand as practicable; and.

(b) If there is only one provider that can meet the requirement, the Division shall conduct the procurement in accordance with Section 63G-6a-802.

R23-1-404. Small Purchases (Commodities).

Small purchases shall be conducted in accordance with the requirements set forth in Section 63G-6a-408. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

(1) "Small Purchase" means a procurement conducted by the Division that does not require the use of a standard procurement process.

(2) Small Purchase thresholds for commodities:

(a) The "Individual Procurement" threshold is a maximum amount of \$1,000 for a procurement item;

(i) For individual procurement item(s) costing up to \$1,000, the Division may select the best source by direct award and without seeking competitive bids or quotes.

(a) The single procurement aggregate threshold is a maximum amount of \$5,000 for multiple procurement item(s) purchased from one source at one time; and

(b) The annual cumulative threshold from the same source is a maximum amount of \$50,000.

(3) Whenever practicable, the Division shall use a rotation system or other system designed to allow for competition when using the small purchases process for commodities.

R23-1-405. Small Purchases Threshold for Architectural and Engineering Services.

(1) The small purchase threshold for architectural or

engineering services is a maximum amount of \$100,000.

(2) Architectural or engineering services may be procured up to a maximum of \$100,000, by direct negotiation.

(3) The Division shall follow the process described in Section 63G-6a-403 to prequalify potential vendors and Section 63G-6a-404 if the Division develops an approved vendor list, or Part 15 of the Utah Procurement Code for the selection of architectural and engineering services.

(4) The Division shall include minimum specifications when using the small purchase threshold for architectural and engineering services.

R23-1-406. Small Purchases Threshold for Construction Projects.

(1) The small construction project threshold is a maximum of \$2,500,000 for direct construction costs, including design and allowable furniture or equipment costs;

(2) The Division shall follow the process described in the Section 63G-6a-403 to prequalify potential vendors and Section 63G-6a-404 to develop an Approved Vendor List or other applicable selection methods described in the Utah Procurement Code for construction services.

(3) The Division shall include minimum specifications when using the small purchases threshold for construction projects.

(4) The Director may procure small construction projects up to a maximum of \$25,000 by direct award without seeking competitive bids or quotes after documenting that all building code approvals, licensing requirements, permitting, and other construction related requirements are met. The awarded contractor must certify that they are capable of meeting the minimum specifications of the project.

(5) The Director may procure small construction projects costing more than \$25,000 up to a maximum of \$100,000 by obtaining a minimum of two competitive quotes that include minimum specifications and shall award to the contractor with the lowest quote that meets the specifications after documenting that all applicable building code approvals, licensing requirements, permitting and other construction related requirements are met.

(6) The Division shall procure construction projects over \$100,000 using an invitation to bid, request for proposals, approved vendor list, or other approved source selection method provided in the Utah Procurement Code.

R23-1-407. Quotes for Small Purchases of Commodities from \$1,001 to \$50,000.

The following applies to commodities:

(1) For procurement item(s) where the cost is greater than \$1,000 but up to a maximum of \$5,000, the Division shall obtain a minimum of two competitive quotes, which may be by email, phone or verbal, that include minimum specifications and shall purchase the procurement item from the responsible vendor offering the lowest quote that meets the specifications.

(2) For procurement item(s) where the cost is greater than \$5,000 up to a maximum of \$50,000, the Division shall obtain a minimum of two competitive quotes, that include minimum specifications, which must be communicated to the proposed vendors in writing, and shall purchase the procurement item from the responsible vendor offering the lowest quote that meets the specifications.

(3) For procurement item(s) costing over \$50,000, the Division shall conduct an invitation for bids or other procurement process outlined in the Utah Procurement Code.

(4) The names of the vendors offering quotations and bids and the date and amount of each quotation or bid shall be recorded and maintained as a governmental record.

R23-1-408. Small Purchases of Services of Professionals, Providers, and Consultants.

(1) The small purchase threshold for professional service providers and consultants is a maximum amount of \$100,000.

(2) After reviewing the qualifications, the Director may obtain professional services or consulting services up to a maximum of \$100,000 by direct negotiation.

R23-1-501. Request for Information.

In addition to the requirements of Part 5 of the Utah Procurement Code, a Request for Information should indicate the procedure for business confidentiality claims and other protections provided by the Utah Government Records and Access Management Act.

R23-1-601. Competitive Sealed Bidding; Multiple Stage Bidding; Reverse Auction.

Competitive Sealed Bidding shall be conducted in accordance with the requirements set forth in Sections 63G-6a-601 through 63G-6a-612. All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

R23-1-602. Bidder Submissions.

(1) The invitation for bids shall include the information required by Section 63G-6a-603 and shall also include a "Bid Form" or forms, which shall provide lines for each of the following:

- (a) the bidder's bid price;
- (b) the bidder's acknowledged receipt of addenda issued by the procurement unit;
- (c) the bidder to identify other applicable submissions;
- and (d) the bidder's signature

(2) Bidders may be required to submit descriptive literature and/or product samples to assist the Director in evaluating whether a procurement item meets the specifications and other requirements set forth in the invitation to bid.

(a) Product samples must be furnished free of charge unless otherwise stated in the invitation for bids, and if not destroyed by testing, will upon written request within any deadline stated in the invitation for bids, be returned at the bidder's expense. Samples must be labeled or otherwise identified as specified in the invitation for bids by the procurement unit.

(3) The provisions of Rule R23-1-705 shall apply to protected records.

(4) Bid, payment and performance bonds or other security may be required for procurement items as set forth in the invitation for bids. Bid, payment and performance bond amounts shall be as prescribed by applicable law or must be based upon the estimated level of risk associated with the procurement item and may not be increased above the estimated level of risk with the intent to reduce the number of qualified bidders.

R23-1-603. Pre-Bid Conferences and Site Visits.

(1) Except as authorized in writing by the Director, pre-bid conferences and site visits must require mandatory attendance by all bidders.

(a) A pre-bid conference may be attended via the following:

- (i) attendance in person;
- (ii) teleconference participation;
- (iii) webinar participation;
- (iv) participation through other electronic media

approved by the Director.

(b) Mandatory site visits must be attended in person.

(c) All pre-bid conferences and site visits must be attended by an authorized representative of the person or vendor submitting a bid and as may be further specified in the procurement documents.

(d) The solicitation must state that failure to attend a mandatory pre-bid conference shall result in the disqualification of any bidder that does not have an authorized representative attend the entire duration of the mandatory pre-bid conference.

(e) The solicitation must state that failure to attend a mandatory site visit shall result in the disqualification of any bidder that does not have an authorized representative attend the entire duration of the mandatory site visit.

(f) At the discretion of the conducting procurement unit, audio or video recordings of pre-bid conferences and site visits may be used.

(g) Listening to or viewing audio or video recordings of a mandatory pre-bid conference or site visit may not be substituted for attendance.

(2) If a pre-bid conference or site visit is held, the Division shall maintain:

(a) an attendance log including the name of each attendee, the entity the attendee is representing, and the attendee's contact information;

(b) minutes, if there are any, of the pre-bid conference or site visit;

(c) copies of any documents distributed by the Division to the attendees at the pre-bid conference or site visit; and

(d) any verbal modifications made to any of the solicitation documents. All verbal modifications to the solicitation documents shall be reduced to writing.

(3) The Division shall publish as an Addendum to the solicitation, the information in R23-1-603 (2)(a) above.

R23-1-604. Addenda to Invitation for Bids.

Prior to the submission of bids, a procurement unit may issue addenda which may modify any aspect of the Invitation for Bids.

(1) Addenda shall be distributed within a reasonable time to allow prospective bidders to consider the addenda in preparing bids.

(2) After the due date and time for submitting bids, at the discretion of the Director, addenda to the Invitation for Bids may be limited to bidders that have submitted bids, provided the addenda does not make a substantial change to the Invitation for Bids that, in the opinion of the Director, likely would have impacted the number of bidders responding to the Invitation for Bids.

R23-1-605. Bids and Modifications to a Bid Received After the Due Date and Time.

(1) Bids and modifications to a bid submitted electronically or by physical delivery, after the established due date and time, will not be accepted for any reason, except as determined in R23-1-605(4).

(2) When submitting a bid or modification electronically, bidders must allow sufficient time to complete the online forms and upload documents. The solicitation will end at the closing time posted in the electronic system. If a bidder is in the middle of uploading a bid when the closing time arrives, the system will stop the process and the bid or modification to the bid will not be accepted.

(3) When submitting a bid or modification to a bid by physical delivery (U.S. Mail, courier service, hand-delivery, or other physical means) bidders are solely responsible for meeting the deadline. Delays caused by a delivery service or other physical means will not be considered as an acceptable

reason for a bid or modification to a bid being late.

(4) All bids or modifications to bids received by physical delivery will be date and time stamped by the procurement unit.

(5) To the extent that an error on the part of the Division results in a bid or modification to a bid not being received by the established due date and time, the bid or modification to a bid shall be accepted as being on time.

R23-1-606. Errors in Bids.

The following shall apply to the correction or withdrawal of an inadvertently erroneous bid, or the cancellation of an award or contract that is based on an unintentionally erroneous bid. A decision to permit the correction or withdrawal of a bid or the cancellation of any award or a contract under this Rule shall be supported in a written document, signed by the Director.

(1) Errors attributed to a bidder's error in judgment may not be corrected.

(2) Provided that there is no change in bid pricing or the cost evaluation formula, errors not attributed to a bidder's error in judgment may be corrected if it is in the best interest of the procurement unit and correcting the mistake maintains the fair treatment of other bidders.

(a) Examples include:

(i) missing signatures;

(ii) missing acknowledging receipt of an addendum;

(iii) missing copies of professional licenses, bonds, insurance certificates, provided that copies are submitted by the deadline established by the Director to correct this mistake;

(iv) typographical errors;

(v) mathematical errors not affecting the total bid price;

or (vi) other errors deemed by the Director to be immaterial or inconsequential in nature.

(3) The Director shall approve or deny, in writing, a bidder's request to correct or withdraw a bid.

(4) Corrections or withdrawal of bids shall be conducted in accordance with Section 63G-6a-605.

(5) If there is any deficiency or failure to submit a required sublist and/or "bid" bond, the Division may request that the bidder who is not in compliance, submit the required sublist and/or "bid" bond by 5 p.m. of the next business day after notice is provided by the Division. Failure to cure the deficiency or failure to submit any required sublist and/or "bid" bond by 5:00 p.m. of the next business day after notice is provided by the Division shall make the bidder ineligible for consideration of award of the contract.

R23-1-607. Errors Discovered After the Award of Contract.

(1) Errors discovered after the award of a contract may only be corrected if, after consultation with the Director and the attorney general's office, it is determined that the correction of the mistake does not violate the requirements of the Utah Procurement Code or these administrative rules.

(2) Any correction made under this subsection must be supported by a written determination signed by the Director.

R23-1-608. Re-solicitation of a Bid.

(1) Re-solicitation of a bid may occur only if the Director determines that:

(a) A material change in the scope of work or specifications has occurred;

(b) procedures outlined in the Utah Procurement Code were not followed;

(c) additional public notice is desired;

(d) there was a lack of adequate competition; or

(e) other reasons exist that are in the best interests of the

procurement unit.

(2) Re-solicitation may not be used to avoid awarding a contract to a qualified vendor in an attempt to steer the award of a contract to a favored vendor.

R23-1-609. Only One Bid Received.

(1) If only one responsive and responsible bid is received in response to an Invitation for Bids, including multiple stage bidding, an award may be made to the single bidder if the Director determines that the price submitted is fair and reasonable, and that other prospective bidders had a reasonable opportunity to respond, or there is not adequate time for re-solicitation. Otherwise, the bid may be rejected and:

- (a) a new invitation for bids solicited;
- (b) the procurement canceled; or
- (c) the procurement may be conducted as a sole source under Section 63G-6a-802.

R23-1-610. Multiple or Alternate Bids.

(1) Multiple or alternate bids will not be accepted, unless otherwise specifically required or allowed in the invitation for bids.

(2) If a bidder submits multiple or alternate bids that are not requested in the invitation for bids, the Director will only accept the bidder's primary bid and will not accept any other bids constituting multiple or alternate bids.

R23-1-611. Methods to Resolve Tie Bids.

(1) In accordance with Section 63G-6a-608, in the event of tie bids, the contract shall be awarded to the procurement item offered by a Utah resident bidder, provided the bidder indicated on the invitation to bid form that it is a Utah resident bidder.

(2) If a Utah resident bidder is not identified, an acceptable method when there are two tie bids shall be for the Director to toss a coin in the presence of a minimum of three witnesses with the firm first in alphabetical order being "heads."

(3) Other methods to resolve a tie bid described in Section 63G-6a-608 may be used as deemed appropriate by the Director.

R23-1-612. Publication of Award.

(1) The Division shall, on the day on which the award of a contract is announced, make available to each bidder and to the public a notice that includes:

- (a) the name of the bidder to which the contract is awarded and the price(s) of the procurement item(s); and
- (b) the names and the prices of each bidder to which the contract is not awarded.

R23-1-613. Multiple Stage Bidding Process.

Multiple stage bidding shall be conducted in accordance with the requirements set forth in Section 63G-6a-609, Utah Procurement Code.

(1) The Director may hold a pre-bid conference as described in Rule R33-6-103 to discuss the multiple stage bidding process or for any other permissible purpose.

R23-1-614. Technology Acquisitions.

(1) The Division in an Invitation for Bids may state that at any time during the term of a contract, that the Division may undertake a review in consultation with the Utah Technology Advisory Board and the Department of Technology Services to determine whether a new technology exists that is in the best interest of the acquiring agency, taking into consideration cost, life-cycle, references, current customers, and other factors and that the acquiring agency

reserves the right to:

- (a) negotiate with the contractor for the new technology, provided the new technology is substantially within the original scope of work;
 - (b) terminate the contract in accordance with the existing contract terms and conditions; or
 - (c) conduct a new procurement for an additional or supplemental contract as needed to take into account new technology.
- (2) Subject to the provisions of Section 63G-6a-802, the trial use or testing of new technology may be permitted for a duration not to exceed the maximum time necessary to evaluate the technology.

R23-1-615. Subcontractor Lists.

The Division may not consider, or award to, any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of Section 63A-5-208 and this Rule. For purposes of this Rule R23-1-615, the definitions of Section 63A-5-208 shall be applicable. Within 24 hours after the bid opening time, not including Saturdays, Sundays and state holidays, the apparent lowest three bidders, as well as other bidders that desire to be considered, shall submit to the Division a list of their first-tier subcontractors that are in excess of the dollar amounts stated in Subsection 63A-5-208(3)(a)(i)(A).

- (1) The subcontractor list shall include the following:
 - (a) the type of work the subcontractor is to perform;
 - (b) the subcontractor's name;
 - (c) the subcontractor's bid amount;
 - (d) the license number of the subcontractor issued by the Utah Division of Occupational and Professional Licensing, if such license is required under Utah law; and
 - (e) the impact that the selection of any alternate included in the solicitation would have on the information required by this Subsection (14).

(2) The contract documents for a specific project may require that additional information be provided regarding any contractor, subcontractor, or supplier.

(3) If pursuant to Subsection 63A-5-208(4), a bidder intends to perform the work of a subcontractor or obtain, at a later date, a bid from a qualified subcontractor, the bidder shall:

- (a) comply with the requirements of Section 63A-5-208 and
- (b) clearly list himself/herself on the subcontractor list form.

(4) Errors on the subcontractor list will not disqualify the bidder if the bidder can demonstrate that the error is a result of his reasonable reliance on information that was provided by the subcontractor and was used to meet the requirements of this section, and, provided that this does not result in an adjustment to the bidder's contract amount.

(5) Pursuant to Sections 63A-5-208 and 63G-2-305, information contained in the subcontractor list submitted to the Division shall be classified public except for the amount of subcontractor bids which shall be classified as protected until a contract has been awarded to the bidder at which time the subcontractor bid amounts shall be classified as public. During the time that the subcontractor bids are classified protected, they may only be made available to procurement and other officials involved with the review and approval of bids.

(6) Change of Listed Subcontractors. Subsequent to twenty-four hours after the bid opening, the contractor may change his listed subcontractors only after receiving written permission from the Director based on complying with all of the following:

- (a) The contractor has established in writing that the

change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but is not limited to, the following reasons:

- (i) the original subcontractor has failed to perform, or is not qualified or capable of performing
- (ii) the subcontractor has requested in writing to be released
- (b) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors;
- (c) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping;
- (d) Any increase in the cost of the subject subcontractor work shall be borne by the contractor; and
- (e) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.

R23-1-616. Bids Over Budget.

(1) In the event all bids for a construction project exceed available funds as certified by the appropriate fiscal officer, and the low responsive and responsible bid does not exceed those funds by more than 5%, the Director may, where time or economic considerations preclude resolicitation of work of a reduced scope, negotiate an adjustment of the bid price, including changes in the bid requirements, with the low responsive and responsible bidder in order to bring the bid within the amount of available funds.

(2) As an alternative to the procedure authorized in Subsection (1), when all bids for a construction project exceed available funds as certified by the Director, and the Director finds that due to time or economic considerations the re-solicitation of a reduced scope of work would not be in the interest of the state, the Director may negotiate an adjustment in the bid price using one of the following methods:

- (a) reducing the scope of work in specific subcontract areas and supervising the re-bid of those subcontracts by the low responsive and responsible bidder;
- (b) negotiating with the low responsive and responsible bidder for a reduction in scope and cost with the value of those reductions validated in accordance with Section R23-1-50; or
- (c) revising the contract documents and soliciting new bids only from bidders who submitted a responsive bid on the original solicitation. This re-solicitation may have a shorter bid response time than otherwise required.
- (3) The use of one of the alternative procedures provided for in this subsection (2) must provide for the fair and equitable treatment of bidders.
- (4) The Director's written determination, including a brief explanation of the basis for the decision shall be included in the contact file.
- (5) This Rule does not restrict in any way, the right of the Director to use any emergency or sole source procurement provisions, or any other applicable provisions of State law or rule which may be used to award the construction project.

R23-1-701. Conducting the Request for Proposals Standard Procurement Process.

Request for Proposals shall be conducted in accordance with the requirements set forth in Sections 63G-6a-701 through 63G-6a-711, Utah Procurement Code. All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

R23-1-702. Content of the Request for Proposals.

(1) In addition to the requirements set forth under Section 63G-6a-703, the request for proposals solicitation shall include:

- (a) a description of the format that offerors are to use when submitting a proposal including any required forms; and
- (b) instructions for submitting price.
- (2) The Division is responsible for all content contained in the request for proposals solicitation documents, including:
 - (a) reviewing all schedules, dates, and timeframes;
 - (b) approving content of attachments;
 - (c) providing the Division with redacted documents, as applicable;
 - (d) assuring that information contained in the solicitation documents is public information; and
 - (e) understanding the scope of work, all evaluation criteria, requirements, factors, and formulas to be used in determining the scoring of proposals; and
 - (f) the requirements of Section 63G-6a-402(6).

R23-1-703. Multiple Stage RFP Process.

(1) In addition to the requirements set forth under Section 63G-6a-710, the multiple stage request for proposals solicitation shall include:

- (a) a description of the stages and the criteria and scoring that will be used to evaluate proposals at each stage; and
- (b) the methodology used to determine which proposals shall be disqualified from additional stages.

R23-1-704. (Reserved for Expansion).

Reserved.

R23-1-705. Protected Records.

(1) The following are protected records and may be redacted by the vendor subject to the procedures described below in accordance with the Governmental Records Access and Management Act (GRAMA) Title 63G, Chapter 2 of the Utah Code.

- (a) Trade Secrets, as defined in Section 13-24-2 of the Utah Code.
- (b) Commercial information or non-individual financial information subject to the provisions of Section 63G-2-305(2).
- (c) Other Protected Records under GRAMA.
- (2) Process For Requesting Non-Disclosure. Any person requesting that a record be protected shall include with the proposal or submitted document:
 - (a) a written indication of which provisions of the proposal or submitted document are claimed to be considered for business confidentiality or protected (including trade secrets or other reasons for non-disclosure under GRAMA); and
 - (b) a concise statement of the reasons supporting each claimed provision of business confidentiality or protected.

R23-1-706. Notification.

(1) A person who complies with Rule R23-1-705 shall be notified by the procurement unit prior to the public release of any information for which a claim of confidentiality has been asserted.

(2) Except as provided by court order, the procurement unit to whom the request for a record is made under GRAMA, may not disclose a record claimed to be protected under Rule R23-1-705 but which the procurement unit or State Records Committee determines should be disclosed until the period in which to bring an appeal expires or the end of the appeals process, including judicial appeal, is reached. This Rule R23-

1-706 does not apply where the claimant, after notice, has waived the claim by not appealing or intervening before the State Records Committee. To the extent allowed by law, the parties to a dispute regarding the release of a record may agree in writing to an alternative dispute resolution process.

(3) Any allowed disclosure of public records submitted in the request for proposal process will be made only after the selection of the successful offeror(s) has been made public in compliance with Section 63G-6a-709.5.

R23-1-707. Process for Submitting Proposals with Protected Business Confidential Information.

(1) If an offeror submits a proposal that contains information claimed to be business confidential or protected information, the offeror must submit two separate proposals:

(a) One redacted version for public release, with all protected business confidential information either blacked-out or removed, clearly marked as "Redacted Version"; and

(b) One non-redacted version for evaluation purposes clearly marked as "Protected Business Confidential."

(i) Pricing may not be classified as business confidential and will be considered public information.

(ii) An entire proposal may not be designated as "PROTECTED", "CONFIDENTIAL" or "PROPRIETARY" and shall be considered non-responsive unless the offeror removes the designation.

R23-1-708. Pre-Proposal Conferences and Site Visits.

(1) Except as authorized in writing by the Director, pre-proposal conferences and site visits must require mandatory attendance by all offerors.

(a) A pre-proposal conference may be attended via the following:

- (i) attendance in person;
- (ii) teleconference participation;
- (iii) webinar participation;
- (iv) participation through other electronic media approved by the Director.

(b) Mandatory site visits must be attended in person.

(c) All pre-proposal conferences and site visits must be attended by an authorized representative of the person or vendor submitting a proposal and as may be further specified in the procurement documents.

(d) The solicitation must state that failure to attend a mandatory pre-proposal conference shall result in the disqualification of any offeror that does not have an authorized representative attend the entire duration of the mandatory pre-proposal conference.

(e) The solicitation must state that failure to attend a mandatory site visit shall result in the disqualification of any offeror that does not have an authorized representative attend the entire duration of the mandatory site visit.

(f) At the discretion of the conducting procurement unit, audio or video recordings of pre-proposal conferences and site visits may be used.

(g) Listening to or viewing audio or video recordings of a mandatory pre-proposal conference or site visit may not be substituted for attendance.

(2) If a pre-proposal conference or site visit is held, the Division unit shall maintain:

(a) an attendance log including the name of each attendee, the entity the attendee is representing, and the attendee's contact information;

(b) minutes, if there are any, of the pre-proposal conference or site visit;

(c) copies of any documents distributed by the Division to the attendees at the pre-proposal conference or site visit;

(d) any verbal modification made to any of the solicitation documents. All verbal modifications to the

solicitation documents shall be reduced to writing.

(3) The Division shall publish as an addendum to the solicitation, the information in R23-1-708(2)(a) above.

R23-1-709. Addenda to Request for Proposals.

(1) Addenda to the Request for Proposals may be made for the purpose of:

- (a) making changes to:
 - (i) the scope of work;
 - (ii) the schedule;
 - (iii) the qualification requirements;
 - (iv) the criteria;
 - (v) the weighting; or
 - (vi) other requirements of the Request for Proposal.
- (b) Addenda shall be published within a reasonable time

prior to the deadline that proposals are due, to allow prospective offerors to consider the addenda in preparing proposals. Publication at least 5 calendar days prior to the deadline that proposals are due shall be deemed a reasonable time. Minor addenda and urgent circumstances may require a shorter period of time.

(2) After the due date and time for submitting a response to Request for Proposals, at the discretion of the Director, addenda to the Request for Proposals may be limited to offerors that have submitted proposals, provided the addenda does not make a substantial change to the Request for Proposals that, in the opinion of the Director likely would have impacted the number of Offerors responding to the original publication of the Request for Proposals.

R23-1-710. Modification or Withdrawal of Proposal Prior to Deadline.

A proposals may be modified or withdrawn prior to the established due date and time for responding.

R23-1-711. Proposals and Modifications, Delivery and Time Requirements.

(1) Except as provided in R23-1-711(5) below, proposals and modifications to a proposal submitted electronically or by physical delivery, after the established due date and time, will not be accepted for any reason.

(2) When submitting a proposal or modification to a proposal electronically, offerors must allow sufficient time to complete the online forms and upload documents. The solicitation will end at the closing time posted in the electronic system. If an offeror is in the middle of uploading a proposal when the closing time arrives, the system should stop the process and the proposal or modification to a proposal will not be accepted.

(3) When submitting a proposal or modification to a proposal by physical delivery (U.S. Mail, courier service, hand-delivery, or other physical means) offerors are solely responsible for meeting the deadline. Delays caused by a delivery service or other physical means will not be considered as an acceptable reason for a proposal or modification to a proposal being late.

(4) All proposals or modifications to proposals received by physical delivery will be date and time stamped by the Division.

(5) To the extent that an error on the part of the Division results in a proposal or modification to a proposal not being received by the established due date and time, the proposal or modification to a proposal shall be accepted as being on time.

R23-1-712. Errors in Proposals.

The following shall apply to the correction or withdrawal of an unintentionally erroneous proposal, or the cancellation of an award or contract that is based on an unintentionally

erroneous proposal. A decision to permit the correction or withdrawal of a proposal or the cancellation of an award or a contract shall be supported in a written document, signed by the Director.

(1) Mistakes attributed to an offeror's error in judgment may not be corrected.

(2) Unintentional errors not attributed to an offeror's error in judgment may be corrected if it is in the best interest of the procurement unit and correcting the error maintains the fair treatment of other offerors.

(a) Examples include:

(i) missing signatures,

(ii) missing acknowledgement of an addendum;

(iii) missing copies of professional licenses, bonds, insurance certificates, provided that copies are submitted by the deadline established by the Director to correct this mistake;

(iv) typographical errors;

(v) mathematical errors not affecting the total proposed price; or

(vi) other errors deemed by the Director to be immaterial or inconsequential in nature.

(3) Unintentional errors discovered after the award of a contract may only be corrected if, after consultation with the Director and the Attorney General's Office, it is determined that the correction of the error does not violate the requirements of the Utah Procurement Code or these administrative rules.

R23-1-713. Evaluation of Proposals.

The evaluation of proposals shall be conducted in accordance with Part 7 of the Utah Procurement Code.

R23-1-714. Correction or Withdrawal of Proposal, Sublist and Bond errors.

(1) In the event an offeror submits a proposal that on its face appears to be impractical, unrealistic or otherwise in error, the Director may contact the offeror to either confirm the proposal, permit a correction of the proposal, or permit the withdrawal of the proposal, in accordance with Section 63G-6a-706.

(2) Offerors may not correct errors, deficiencies, or incomplete responses in a proposal that has been determined to be not responsible, not responsive, or that does not meet the mandatory minimum requirements stated in the request for proposals in accordance with Section 63G-6a-704.

(3) If there is any deficiency or failure to submit a required sublist and/or "bid" bond, the Division may request that the offeror who is not in compliance, submit the required sublist and/or "bid" bond by 5 p.m. of the next business day after notice is provided by the Division. Failure to cure the deficiency or failure to submit any required sublist and/or "bid" bond by 5:00 p.m. of the next business day after notice is provided by the Division shall make the offeror ineligible for consideration of award of the contract.

R23-1-715. Interviews and Presentations.

(1) Interviews and presentations may be held as outlined in the RFP.

(2) Offerors invited to interviews or presentations shall be limited to those offerors meeting minimum requirements specified in the RFP.

(3) Representations made by the offeror during interviews or presentations shall become an addendum to the offeror's proposal and shall be documented. Representations must be consistent with the offeror's original proposal and may only be used for purposes of clarifying or filling in gaps in the offeror's proposal.

(4) The Director shall establish a date and time for the

interviews or presentations and shall notify eligible offerors of the procedures. Interviews and presentations will be at the offeror's expense.

R23-1-716. Best and Final Offers.

Best and Final Offers shall be conducted in accordance with Section 63G-6a-707.5. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

(1) The best and final offers (BAFO) process is an optional step in the evaluation phase of the request for proposals process in which offerors are requested to modify their proposals.

(a) An evaluation committee may request best and final offers when:

(i) no single proposal addresses all the specifications;

(ii) all or a significant number of the proposals received are unclear and the evaluation committee requires further clarification;

(iii) additional information is needed in order for the evaluation committee to make a decision;

(iv) the differences between proposals in one or more categories are too slight to distinguish;

(v) all cost proposals are too high or over the budget;

(vi) multiple contract awards are necessary to achieve regional or statewide coverage for a procurement item under an RFP and there are insufficient cost proposals within the budget to award the number of contracts needed to provide regional or statewide coverage.

(2) Only offerors meeting the minimum qualifications or scores described in the RFP are eligible to respond to best and final offers.

(3) Proposal modifications submitted in response to a request for best and final offers may only address the specific issues and/or sections of the RFP described in the request for best and final offers.

(a) Offerors may not use the best and final offers process to correct deficiencies in their proposals not addressed in the request for best and final offers issued by the Division.

(4) When a request for best and final offers is issued to reduce cost proposals, offerors shall submit itemize cost proposals clearly indicating the tasks or scope reductions that can be accomplished to bring costs within the available budget.

(a) The cost information of one offeror may not be disclosed to competing offerors during the best and final offers process and further, such cost information shall not be shared with other offerors until the contract is awarded.

(b) The Division shall ensure that auction tactics are not used in the discussion process, including discussing and comparing the costs and features of other proposals.

(5) The best and final offers process may not be conducted as part of the contract negotiation process. It may only be conducted during the evaluation phase of the RFP process.

(6) A procurement unit may not use the best and final offers process to allow offerors a second opportunity to respond to the entire request for proposals.

(7) If a proposal modification is made orally during the interview or presentation process, the modification must be confirmed in writing.

(8) A request for best and final offers issued by the Division shall:

(a) comply with all public notice requirements provided in Section 63G-6a-406;

(b) include a deadline for submission that allows offerors a reasonable opportunity for the preparation and submission of their responses;

(c) indicate how proposal modifications in response to a request for best and final offers will be evaluated;

(9) If an offeror does not submit a best and final offer, its immediately previous proposal will be considered its best and final offer;

(10) Unsolicited best and final offers will not be accepted from offerors.

R23-1-717. Cost-benefit Analysis Exception: CM/GC.

(1) A cost-benefit analysis is not required if the contract is awarded solely on the qualifications of the construction manager/general contractor and the management fee described in Section 63G-6a-708 provided:

- (a) a competitive process is maintained by the issuance of a request for proposals that requires the offeror to provide, at a minimum:
 - (i) a management plan;
 - (ii) references;
 - (iii) statements of qualifications; and
 - (iv) a management fee only if requested by the Division.

The management fee may not be requested by the Division if the management fee is not part of the criteria for the evaluation committee. The Division may use a fee table for this management fee.

- (b) the management fee contains only the following:
 - (i) preconstruction phase services;
 - (ii) monthly supervision fees for the construction phase;

and

- (iii) overhead and profit for the construction phase.
- (c) the evaluation committee may, as described in the solicitation, weight and score the management fee as a fixed rate or a fixed percentage of the estimated contract value.

(d) the contract awarded must be in the best interest of the procurement unit.

R23-1-718. Only One Proposal Received.

(1) If only one proposal is received in response to a request for proposals, the evaluation committee may:

- (a) conduct a review to determine if:
 - (i) the proposal meets the minimum requirements;
 - (ii) pricing and terms are reasonable; and
 - (iii) the proposal is in the best interest of the procurement unit.

(b) if the evaluation committee determines the proposal meets the minimum requirements, pricing and terms are reasonable, and the proposal is in the best interest of the procurement unit, the procurement unit may make an award.

(c) If an award is not made, the procurement unit may either cancel the procurement or re-solicit for the purpose of obtaining additional proposals.

R23-1-719. Publicizing Awards.

(1) In addition to the requirements of Section 63G-6a-709.5, the following shall be disclosed after receipt of a GRAMA request and payment of any lawfully enacted and applicable fees:

- (a) the contract(s) entered into as a result of the selection and the successful proposal(s), except for those portions that are to be non-disclosed under Rule R23-1-705;
- (b) the unsuccessful proposals, except for those portions that are to be non-disclosed under Rule R23-1-705;
- (c) the rankings of the proposals;
- (d) the names of the members of any selection committee (reviewing authority);
- (e) the final scores used by the selection committee to make the selection, except that the names of the individual scorers shall not be associated with their individual scores or rankings.
- (f) the written justification statement supporting the

selection, except for those portions that are to be non-disclosed under Rule R23-1-705.

(2) After due consideration and public input, the following has been determined by the Board to impair governmental procurement proceedings or give an unfair advantage to any person proposing to enter into a contract or agreement with a governmental entity, and will not be disclosed by the governmental entity at any time to the public including under any GRAMA request:

- (a) the names of individual scorers/evaluators in relation to their individual scores or rankings;
- (b) any individual scorer's/evaluator's notes, drafts, and working documents;
- (c) non-public financial statements; and
- (d) past performance and reference information, which is not provided by the offeror and which is obtained as a result of the efforts of the governmental entity. To the extent such past performance or reference information is included in the written justification statement; it is subject to public disclosure.

R23-1-801. Sole Source - Award of Contract Without Competition.

(1) Sole source procurements shall be conducted in accordance with the requirements set forth in Section 63G-6a-802, Utah Procurement Code. All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and should be used in conjunction with the Procurement Code.

(2) A sole source procurement may be conducted if:

- (a) there is only one source for the procurement item;
- (b) the award to a specific supplier, service provider, or contractor is a condition of a donation or grant that will fund the full cost of the supply, service, or construction item; or
- (c) the procurement item is needed for trial use or testing to determine whether the procurement item will benefit the procurement unit.

(3) An urgent or unexpected circumstance or requirement for a procurement item does not justify the award of a sole source procurement.

(4) Requests for a procurement to be conducted as a sole source shall be submitted in writing to the Director for approval.

(5) The sole source request shall be submitted to the Director and shall include:

- (a) a description of the procurement item;
- (b) the total dollar value of the procurement item, including, when applicable, the actual or estimated full lifecycle cost of maintenance and service agreements;
- (c) the duration of the proposed sole source contract;
- (d) an authorized signature of the requester;
- (e) unless the sole source procurement is conducted under Rule R23-1-801(2)(b) or (c), research completed by the requester documenting that there are no other competing sources for the procurement item;
- (f) any other information requested by the Director; and
- (6) a sole source request form containing all of the requirements of Rule R23-1-801(5) may be available on the division's website and/or may be described in specifications or other contract documents.
- (7) Except as provided in (b), sole source procurements over \$50,000 shall be published in accordance with Section 63G-6a-406.

(a) Sole source procurements under \$50,000 are not required to be published but may be published at the discretion of the Director.

(b) The requirement for publication of notice for a sole source procurement is waived:

- (i) for public utility services;
- (ii) if the award to a specific supplier, service provider, or contractor is a condition of a donation or grant that will fund the full cost of the supply, service, or construction item;
- (iii) when the circumstances of the request are clear that there can only be one source; or
- (iv) for other circumstances as determined in writing by the Director.

(8) A person may contest a sole source procurement prior to the closing of the public notice period set forth in Section 63G-6a-406, when public notice is required under this Rule R23-1-801 by submitting the following information in writing to the Director:

- (a) the name of the contesting person; and
- (b) a detailed explanation of the challenge, including documentation showing that there are other competing sources for the procurement item.

(9) Upon receipt of information contesting a sole source procurement, the Director shall conduct an investigation to determine the validity of the challenge and make a written determination either supporting or denying the challenge.

R23-1-802. Trial Use or Testing of a Procurement Item, Including New Technology.

The trial use or testing of a procurement item, including new technology, shall be conducted as set forth in Section 63G-6a-802, Utah Procurement Code.

R23-1-803. Alternative Procurement Methods.

(1) The Director may utilize alternative procurement methods to acquire procurement items such as those listed below when it is determined in writing by the Director, to be more practicable or advantageous to the procurement unit:

- (a) used vehicles;
- (b) livestock;
- (c) hotel conference facilities and services;
- (d) speaker honorariums;
- (e) hosting out-of-state and international dignitaries;
- (f) international promotion of the state; and
- (g) any other procurement item for which a standard procurement method is not reasonably practicable.

(2) When making this determination, the Director may take into consideration whether:

- (a) the potential cost of preparing, soliciting and evaluating bids or proposals is expected to exceed the benefits normally associated with such solicitations;
- (b) the procurement item cannot be acquired through a standard procurement process; and
- (c) the price of the procurement item is fair and reasonable.

(3) In the event that it is so determined, the Director may elect to utilize an alternative procurement method which may include any or all of the following:

- (a) informal price quotations;
- (b) direct negotiations; and
- (c) direct award.

R23-1-804. Emergency Procurement.

(1) Emergency procurements shall be conducted in accordance with the requirements set forth in Section 63G-6a-803, and this rule.

(2) An emergency procurement is a procurement procedure where the procurement unit is authorized to obtain a procurement item without using a standard competitive procurement process.

(3) Emergency procurements are limited to those procurement items necessary to mitigate the emergency.

(4) While a standard procurement process is not required under an emergency procurement, when practicable,

the Division should seek to obtain as much competition as possible through use of phone quotes, internet quotes, limited invitations to bid, or other selection methods while avoiding harm, or risk of harm, to the public health, safety, welfare, property, or impairing the ability of a public entity to function or perform required services.

(5) The Division shall make a written determination documenting the basis for the emergency and the selection of the procurement item. A record of the determination and selection shall be kept in the contract file. The documentation may be made after the emergency condition has been alleviated.

R23-1-805. Declaration of "Official State of Emergency".

Upon a declaration of an "Official State of Emergency" by the authorized state official, the Director shall implement the division's Continuity of Operations Plan, or COOP. When activated, the division shall follow the procedures outlined in the plan and take appropriate actions as directed by the procurement unit responsible for authorizing emergency acquisitions of procurement items.

R23-1-901. General Provisions.

(1) An Invitation for Bids, a Request for Proposals, or other solicitation may be canceled prior to the deadline for receipt of bids, proposals, or other submissions, when it is in the best interests of the procurement unit as determined by the Division. In the event a solicitation is cancelled, the reasons for cancellation shall be made part of the procurement file and shall be available for public inspection and the Division shall:

- (a) re-solicit new bids or proposals using the same or revised specifications; or,
- (b) withdraw the requisition for the procurement item(s).

R23-1-902. Re-solicitation.

(1) In the event there is no initial response to an initial solicitation, the Director may:

- (a) contact the known supplier community to determine why there were no responses to the solicitation;
- (b) research the potential vendor community; and,
- (c) based upon the information in (a) and (b) require the Division to modify the solicitation documents.

(2) If the Division has modified the solicitation documents and after the re-issuance of a solicitation, there is still no competition or there is insufficient competition, the Director, shall:

- (a) require the Division to further modify the procurement documents; or,
- (b) cancel the requisition for the procurement item(s).

R23-1-903. Cancellation Before Award.

(1) Solicitations may be cancelled before award but after opening all bids or offers when the Director determines in writing that:

- (a) inadequate or ambiguous specifications were cited in the solicitation;
- (b) the specifications in the solicitation have been or must be revised;
- (c) the procurement item(s) being solicited are no longer required;

(d) the solicitation did not provide for consideration of all factors of cost to the procurement unit, such as cost of transportation, warranties, service and maintenance;

(e) bids or offers received indicate that the needs of the procurement unit can be satisfied by a less expensive procurement item differing from that in the solicitation;

(f) except as provided in Section 63G-6a-607, all otherwise acceptable bids or offers received are at

unreasonable prices, or only one bid or offer is received and the Director cannot determine the reasonableness of the bid price or cost proposal;

(g) the responses to the solicitation were not independently arrived at in open competition, were collusive, or were submitted in bad faith; or,

(h) no responsive bid or offer has been received from a responsible bidder or offer;

R23-1-904. Alternative to Cancellation.

In the event administrative difficulties are encountered before award but after the deadline for submissions that may delay award beyond the bidders' or offerors' acceptance periods, the bidders or offerors should be requested, before expiration of their bids or offers, to extend in writing the acceptance period (with consent of sureties, if any) in order to avoid the need for cancellation.

R23-1-905. Continuation of Need.

If the solicitation has been cancelled for the reasons specified in Rule R23-1-903 (1)(f), (g) or (h) and the Director has made the written determination in Rule R23-1-903(1) and the Division has an existing contract, the Division may permit an extension of the existing contract under Section 63G-6a-802(7).

R23-1-906. Rejections and Suspension/Debarment.

(1) The Division may reject any or all bids, offers or other submissions, in whole or in part, as may be specified in the solicitation, when it is in the best interest of the procurement unit. In the event of a rejection of any or all bids, offers or other submissions, in whole or in part, the reasons for rejection shall be made part of the procurement file and shall be available for public inspection.

(2) Bids, offers, or other submissions, received from any person that is suspended, debarred, or otherwise ineligible as of the due date for receipt of bids, proposals, or other submissions shall be rejected.

R23-1-907. Rejection for Nonresponsibility or Nonresponsiveness.

(1) Subject to Section 63G-6a-903, the Director shall reject a bid or offer from a bidder or offeror determined to be nonresponsive. A responsible bidder or offeror is defined in Section 63G-6a-103(42).

(2) In accordance with Section 63G-6a-604(3) the Director may not accept a bid that is not responsive. Responsiveness is defined in Section 63G-6a-103(43).

(3) If there is any deficiency or failure to submit a required sublist and/or "bid" bond, the Division may request that the bidder/offeror who is not in compliance, submit the required sublist and/or "bid" bond by 5 p.m. of the next business day after notice is provided by the Division. Failure to cure the deficiency or failure to submit any required sublist and/or "bid" bond by 5:00 p.m. of the next business day after notice is provided by the Division, shall make the bidder/offeror nonresponsive and therefore ineligible for consideration of award of the contract.

(4) The originals of all rejected bids, offers, or other submissions, and all written findings with respect to such rejections, shall be made part of the procurement file and available for public inspection.

R23-1-908. Debarment or Suspension From Consideration for Award of Contracts -- Process -- Causes for Debarment -- Appeal.

The procedures for a debarment or suspension from consideration for award of contracts, including appellate rights, are provided in Section 63G-6a-904. Upon any

suspension or debarment, the person that is suspended or debarred shall be considered nonresponsive and ineligible for the award of contracts by the Division in accordance with the determination of suspension or debarment.

R23-1-1001. Providers of State Products.

(1) In addition to the reciprocal preference requirements contained in Section 63G-6a-1002 for the providers of procurement items produced, manufactured, mined, grown, or performed in Utah, Rule R23-1-10 outlines the process for award of a contract when there is more than one equally low preferred bidder. All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

(2) In the event there is more than one equally low preferred bidder, the Director shall consider the preferred bidders as tie bidders and shall follow the process specified in Section 63G-6a-608 and Rule R23-1-10.

R23-1-1002. Preference for Resident Contractors.

(1) In addition to the reciprocal preference requirements contained in Section 63G-6a-1003 for resident Utah contractors, this rule outlines the process for award of a contract when there is more than one equally low preferred resident contractor.

(2) In the event there is more than one equally low preferred resident contractor, the Director shall consider the preferred resident contractors as tie bidders and shall follow the process specified in Section 63G-6a-608 and this R23-1-10.

R23-1-1003. Exception for Federally Funded Contracts.

This Rule R23-1-10 does not apply to the extent it might jeopardize the receipt of federal funds, conflicts with federal requirements relating to a procurement that involves the expenditure of federal assistance, federal contract funds, or federal financial participation funds.

R23-1-1101. Definitions.

(1) Whenever used in this Rule, the terms "bid", "bidder" and "bid security" apply to all procurements, including non-construction procurements, when the procurement documents, regardless of the procurement type, require securities and/or bonds.

(2) All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

R23-1-1102. Bid Security Requirements for Projects.

(1) Application. The requirements for bid security and bonds under this Rule R23-1-11 shall apply as follows:(a) For the Division, the award of construction contracts where the face amount of the contract is \$100,000 or more.

(b) For other state agencies that are required to use the same or similar documents as the Division for their construction contracts, the award of construction contracts where the face amount of the contract is \$50,000 or more, unless the Division Director, in writing, approves a \$100,000 or more requirement similarly to the Division, based on:

(i) The Division Director's finding that the agency has a selection process for such contracts that are under \$100,000, that ensures a responsible, financially solvent contractor is selected; and

(ii) that the agency has the financial capability to absorb the potential responsibility that can occur due to the lack of

the bid security and bonding requirements for the contract under \$100,000.

(c) At any time the Division or any other state agency can require acceptable bid security as well as performance and payment bonds on contracts that are for amounts below the standard requirements set forth above in this Rule.

(2) Acceptable Bid Security. The term "bid" as used in this Rule R23-1-1102 shall also be deemed to apply to "offer."

(a) Invitations for Bids and Requests For Proposals shall require the submission of acceptable bid security in an amount equal to at least five percent of the bid, at the time the bid is submitted. If a contractor fails to accompany its bid with acceptable bid security, the bid shall be deemed nonresponsive, unless this failure is found to be nonsubstantial as hereinafter provided.

(b) If acceptable bid security is not furnished in accordance with Rule R23-1-907(3), the bid shall be rejected as nonresponsive, unless the failure to comply is determined by the Director to be nonsubstantial. Failure to submit an acceptable bid security may be deemed nonsubstantial if:

(i) the bid security is submitted on a form other than the Division's required bid bond form and the bid security meets all other requirements including being issued by a surety meeting the requirements of Subsection (5);

(ii) the contractor provides acceptable bid security by 5 p.m. of the next business day after notice is provided by the Division of the defective bid security; or

(iii) only one bid is received.

(3) Payment and Performance Bonds. Except as provided in this Rule R23-1-1102(1) above, payment and performance bonds in the amount of 100% of the contract price are required for all contracts in excess of \$50,000. These bonds shall cover the procuring agencies and be delivered by the contractor to the Division at the same time the contract is executed. If a contractor fails to deliver the required bonds, the contractor's bid shall be found nonresponsive and its bid security shall be forfeited.

(4) Forms of Bonds. Bid Bonds, Payment Bonds and Performance Bonds must be from sureties meeting the requirements of Rule R23-1-1102(5) and must be on the exact bond forms most recently adopted by the Board and on file with the Division.

(5) Surety firm requirements. All surety firms must be authorized to do business in the State of Utah and be listed in the U.S. Department of the Treasury Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies for an amount not less than the amount of the bond to be issued. A co-surety may be utilized to satisfy this requirement.

(6) Waiver. The Director may waive any bonding requirements set forth in this Rule if the Director finds circumstances in which the Director considers any or all of the bonds to be unnecessary to protect the State. Any such waiver shall be stated in writing, explain the circumstances why the bond(s) is not necessary to protect the procurement unit, and the waiver shall be made part of the project file.

(7) The Director may require an acceptable bid security on projects that are for amounts less than the standard amount set forth in this Rule R23-1-1102.

R23-1-1201. Required Contract Clauses.

(1) The Division shall comply with Sections 63G-6a-1202 considering clauses for contracts. The Division will establish standard contract clauses to assist the Division and to help contractors and potential contractors to understand applicable requirements. These standard contract clauses may be modified as needed to meet the requirements of the particular project.

(2) The Division shall also comply with the requirements of Section 63G-6a-402(6) by requiring that for each contract and request for proposals, the inclusion of a clause that requires the Division, for the duration of the contract, to make available contact information of the winning contractor to the Department of Workforce Services in accordance with Section 35A-2-203. This requirement does not preclude a contractor from advertising job openings in other forums throughout the state.

(3) There shall be compliance with the federal contract prohibition provisions of the Sudan Accountability and Divestment Act of 2007 (Pub. L. No. 110-174) that prohibit contracting with a person doing business in Sudan.

(4) All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

R23-1-1202. Establishment of Terms and Conditions.

The Division may use the Standard Terms and Conditions adopted by the Division of Purchasing and General Services for a particular procurement with modifications.

R23-1-1203. Contracts and Change Orders -- Contract Types.

The Division may use contract types to the extent authorized under Section 63G-6a-1205.

R23-1-1204. Prepayments.

Prepayments are subject to the restrictions contained in Section 63G-6a-1208.

R23-1-1205. Leases of Personal Property.

Leases of personal property are subject to the following:

(1) Leases shall be conducted in accordance with Division of Finance rules and Section 63G-6a-1209.

(2) A lease may be entered into provided the procurement unit complies with Section 63G-6a-1209 and:

(a) it is in the best interest of the procurement unit;

(b) all conditions for renewal and costs of termination are set forth in the lease; and

(c) the lease is not used to avoid a competitive procurement.

(3) Lease contracts shall be conducted with as much competition as practicable.

(4) Executive Branch Procurement Unit Leases with Purchase Option. A purchase option in a lease may be exercised if the lease containing the purchase option was awarded under an authorized procurement process. Before exercising this option, the Division shall:

(a) investigate alternative means of procuring comparable procurement items; and

(b) compare estimated costs and benefits associated with the alternative means and the exercise of the option, for example, the benefit of buying new state of the art data processing equipment compared to the estimated, initial savings associated with exercise of a purchase option.

R23-1-1206. Multi-Year Contracts.

The Division may issue multi-year contracts in accordance with Section 63G-6a-1204. Section 63G-6a-1204 does not apply to a contract for the design or construction of a facility, a road, a public transit project, or a contract for the financing of equipment.

R23-1-1207. Installment Payments.

Procurement units may make installment payments in

accordance with Section 63G-6a-1208.

R23-1-1208. Change Orders.

The Division shall comply with Section 63G-6a-1207.

R23-1-1209. Requirements for Cost or Pricing Data.

(1) For contracts that expressly allow price adjustments, cost or pricing data shall be required in support of a proposal leading to the adjustment of any contract pricing.

(2) Cost or pricing data exceptions:

(a) need not be submitted when the terms of the contract state established market indices, catalog prices or other benchmarks are used as the basis for contract price adjustments or when prices are set by law or rule;

(b) if a contractor submits a price adjustment higher than established market indices, catalog prices or other benchmarks established in the contract, the Director may request additional cost or pricing data; or

(c) the Director may waive the requirement for cost or pricing data provided a written determination is made supporting the reasons for the waiver. A copy of the determination shall be kept in the contract file.

R23-1-1210. Defective Cost or Pricing Data.

(1) If defective cost or pricing data was used to adjust a contract price, the vendor and the Division may enter into discussions to negotiate a settlement.

(2) If a settlement cannot be negotiated, either party may seek relief as provided by applicable laws and rules.

R23-1-1211. Cost Analysis.

(1) Cost analysis includes the verification of cost data. Cost analysis may be used to evaluate:

- (a) specific elements of costs;
- (b) total cost of ownership and life-cycle cost;
- (c) supplemental cost schedules;
- (d) market basket cost of similar items;
- (e) the necessity for certain costs;
- (f) the reasonableness of allowances for contingencies;
- (g) the basis used for allocation of indirect costs; and,
- (h) the reasonableness of the total cost or price.

R23-1-1212. Audit.

The Division may, at reasonable times and places, audit or cause to be audited by an independent third party firm, by another procurement unit, or by an agent of the procurement unit, the books, records, and performance of a contractor, prospective contractor, subcontractor, or prospective subcontractor.

R23-1-1213. Retention of Books and Records.

Contractors shall maintain all records related to the contract. These records shall be maintained by the contractor for at least six years after the final payment, unless a longer period is required by law. All accounting for contracts and contract price adjustments, including allowable incurred costs, shall be conducted in accordance with generally accepted accounting principles for government.

R23-1-1214. Inspections.

Circumstances under which the Division may perform inspections include inspections of the contractor's manufacturing/production facility or place of business, or any location where the work is performed:

(1) whether the definition of "responsible," as defined in Section 63G-6a-103(40) and in the solicitation documents, has been met or are capable of being met; and

(2) if the contract is being performed in accordance with its terms.

R23-1-1215. Access to Contractor's Manufacturing/Production Facilities.

(1) The Division may enter a contractor's or subcontractor's manufacturing/production facility or place of business to:

(a) inspect procurement items for acceptance by the procurement unit pursuant to the terms of a contract;

(b) audit cost or pricing data or audit the books and records of any contractor or subcontractor pursuant to Utah Code or Administrative Rule; and

(c) investigate in connection with an action to debar or suspend a person from consideration for award of contracts.

R23-1-1216. Inspection of Supplies and Services.

(1) Contracts may provide that the Director or Division may inspect procurement items at the contractor's or subcontractor's facility and perform tests to determine whether the procurement items conform to solicitation and contract requirements.

R23-1-1217. Conduct of Inspections.

(1) No inspector may change any provision of the specifications or the contract without written authorization of the Director. The presence or absence of an inspector or an inspection, shall not relieve the contractor or subcontractor from any requirements of the contract.

(2) When an inspection is made, the contractor or subcontractor shall provide without charge all reasonable facilities and assistance for the safety and convenience of the person performing the inspection or testing.

R23-1-1301. Purpose.

The purpose of this rule is to comply with the provisions of Sections 63G-6a-1302 and 1303 of the Utah Procurement Code. All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Utah Procurement Code.

R23-1-1302. Construction Management Rule.

As required by Section 63G-6a-1302, this rule contains provisions applicable to:

(1) selecting the appropriate method of management for construction contracts;

(2) documenting the selection of a particular method of construction contract management; and

(3) the selection of a construction manager/general contractor.

R23-1-1303. Application.

The provisions of Rules R23-1-1302 through R23-1-1306 shall apply to all procurements of construction.

R23-1-1304. Methods of Construction Contract Management.

(1) This Rule contains provisions applicable to the selection of the appropriate type of construction contract management.

(2) It is intended that the Director have sufficient flexibility in formulating the construction contract management method for a particular project to fulfill the needs of the procurement unit. The methods for achieving the purposes set forth in this rule are not to be construed as an exclusive list.

(3) Before choosing the construction contracting method to use, a careful assessment must be made by the Director of requirements the project shall consider, at a minimum, the following factors:

- (a) when the project must be ready to be occupied;
 - (b) the type of project, for example, housing, offices, labs, heavy or specialized construction;
 - (c) the extent to which the requirements of the procurement unit and the way in which they are to be met are known;
 - (d) the location of the project;
 - (e) the size, scope, complexity, and economics of the project;
 - (f) the amount and type of financing available for the project, including whether the budget is fixed or what the source of funding is, for example, general or special appropriation, federal assistance moneys, general obligation bonds or revenue bonds, lapsing/nonlapsing status and legislative intent language;
 - (g) the availability, qualification, and experience of the procurement unit's personnel to be assigned to the project and how much time the procurement unit's personnel can devote to the project;
 - (h) the availability, qualifications and experience of outside consultants and contractors to complete the project under the various methods being considered;
 - (i) the results achieved on similar projects in the past and the methods used; and
 - (j) the comparative advantages and disadvantages of the construction contracting method and how they might be adapted or combined to fulfill the needs of the procuring agencies.
- (5) The following descriptions are provided for the more common construction contracting management methods which may be used by the procurement unit. The methods described are not all mutually exclusive and may be combined on a project. These descriptions are not intended to be fixed in respect to all construction projects. In each project, these descriptions may be adapted to fit the circumstances of that project.
- (a) **Single Prime (General) Contractor.** The single prime contractor method is typified by one business, acting as a general contractor, contracting with the procurement unit to timely complete an entire construction project in accordance with drawings and specifications provided by the procurement unit. Generally the drawings and specifications are prepared by an architectural or engineering firm under contract with the procurement unit. Further, while the general contractor may take responsibility for successful completion of the project, much of the work may be performed by specialty contractors with whom the prime contractor has entered into subcontracts.
 - (b) **Design-Build.** In a design-build project, an entity, often a team of a general contractor and a designer, contract directly with a procurement unit to meet the procurement unit's requirements as described in a set of performance specifications and/or a program. Design responsibility and construction responsibility both rest with the design-build contractor. This method can include instances where the design-build contractor supplies the site as part of the package.
 - (c) **Construction Manager/General Contractor (Construction Manager at Risk).** The Division may contract with the construction manager early in a project to assist in the development of a cost effective design. In a Construction Manager/General Contractor (CM/GC) method, the CM/GC becomes the general contractor and is at risk for all the responsibilities of a general contractor for the project, including meeting the specifications, complying with applicable laws, rules and regulations, that the project will be completed on time and will not exceed a specified maximum price.

R23-1-1305. Selection of Construction Method

Documentation.

The Director shall include in the contract file a written statement describing the facts that led to the selection of a particular method of construction contract management for each project.

R23-1-1306. Special Provisions Regarding Construction Manager/General Contractor.

(1) In the selection of a construction manager/general contractor, a standard procurement process as defined in Section 63G-6a-103 may be used or an exception allowed under Part 8 of the Utah Procurement Code.

(2) When the CM/GC enters into any subcontract that was not specifically included in the construction manager/general contractor's cost proposal, the CM/GC shall procure the subcontractor(s) by using a standard procurement process as defined in Section 63G-6a-103 of the Utah Procurement Code or an exception to the requirement to use a standard procurement process, described in Part 8 of the Utah Procurement Code.

R23-1-1307. Special Provisions Regarding Design-Build.

(1) The Board authorizes the Division for State building construction projects to use a design-build provider as one method of construction contracting management.

(2) A design-build contract may include a provision for obtaining the site for the construction project.

(3) A design-build contract or a construction manager/general contractor contract may include provision by the contractor of operations, maintenance, or financing.

R23-1-1308. Drug and Alcohol Testing Required for State Contracts: Definitions.

The rules applicable to the Division for drug and alcohol testing are in Rule 23-7 of the Utah Administrative Code.

R23-1-1401. Procurement of Design-Build Transportation Project Contracts.

The Board recognizes that the Utah Department of Transportation is the rulemaking authority for rules under Section 63G-6a-1402(3)(a)(ii) governing the procurement of design-build transportation projects.

R23-1-1501. Architect-Engineer Procurement Process, General Process.

(1) **Application.** The provisions of Part 15 of the Utah Procurement Code apply to every procurement of services within the scope of the practice of architecture as defined by Section 58-3a-102, or professional engineering as defined in Section 58-22-102, except as authorized by Rule R33-4-105. All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

(2) **Architect-Engineer Evaluation Committee.** The Director shall designate members of the Architect-Engineer Evaluation Committee. The evaluation committee must consist of at least three members who are qualified under Section 63G-6a-707.

(3) **Request for Statement of Qualifications.** The Division shall issue a public notice for a request for statement of qualifications to rank architects or engineers. The Division shall:

- (a) state in the request for statement of qualifications:
 - (i) the type of procurement item to which the request for statement of qualifications relates;
 - (ii) the scope of work to be performed;
 - (iii) the instructions and the deadline for providing

information in response to the request for statement of qualifications;

(iv) criteria used to evaluate statements of qualifications including:

- (A) basic information about the person or firm;
- (B) experience and work history;
- (C) management and staff;
- (D) qualifications and certification;
- (E) licenses and certifications;
- (F) applicable performance ratings;
- (G) financial statements; and
- (H) other pertinent information.

(b) Key personal identified in the statement of qualifications may not be changed without the advance written approval of the procurement unit.

(4) Not include Cost in Response. Architects and engineers shall not include cost in a response to a request for statement of qualifications.

(5) Evaluation of Statement of Qualifications. The evaluation committee shall evaluate statements of qualifications in accordance with Section 63G-6a-707 to rank (score) architects or engineers without considering cost.

(6) Negotiation and Award of Contract. The Director shall negotiate a contract with the most qualified firm for the required services at compensation determined to be fair and reasonable based on the Division's rate table or as may be reasonably adjusted by the Director for the particular scope of work, location or other aspects of the services.

(7) Failure to Negotiate Contract With the Highest Ranked Firm.

(a) If fair and reasonable compensation, contract requirements, and contract documents cannot be agreed upon with the highest ranked firm, the Director shall advise the firm in writing of the termination of negotiations.

(b) Upon failure to negotiate a contract with the highest ranked firm, the Director shall proceed in accordance with Section 63G-6a-1505 of the Utah Procurement Code.

(8) Notice of Award.

(a) The Director shall award a contract to the highest ranked firm with which the fee negotiation was successful.

(b) Notice of the award shall be made available to the public.

(8) Written Justification Statements. The Division shall issue a statement justifying the ranking of the firm with which fee negotiation was successful.

R23-1-1502. Disclosure of Submittals, Performance Evaluations, and References.

(1) Except as provided in this rule, submittals shall be open to public inspection after notice of the selection results.

(2) The classification of records as protected and the treatment of such records shall be as provided in Rule R23-1-705.

(3) The Board finds that it is necessary to maintain the confidentiality of performance evaluations and reference information in order to avoid competitive injury and to encourage those persons providing the information to respond in an open and honest manner without fear of retribution. Accordingly, records containing performance evaluations and reference information are classified as protected records under the provisions of Subsection 63G-2-305(6) and shall be disclosed only to those persons involved with the performance evaluation, the architect or engineer that the information addresses and persons involved with the review and selection of submittals. The Division may, however, provide reference information to other governmental entities for use in their procurement activities and to other parties when requested by the architect or engineer that is the subject of the information. Any other disclosure of such performance

evaluations and reference information shall only be as required by applicable law.

R23-1-1503. Publicizing Selections.

(1) Notice. After the selection of the successful firm, notice of the selection shall be available in the principal office of the Division in Salt Lake City, Utah and may be available on the Internet

(2) Information Disclosed. The following shall be disclosed with the notice of selection

- (a) the ranking of the firms
- (b) the names of the selection committee members;
- (c) the final scores used by the selection committee to make the selection, except that the names of the individual scorers shall not be associated with their individual scores; and
- (d) the written justification statement supporting the selection.

(3) Information Classified as Protected. After due consideration and public input, the following has been determined by the Board to impair governmental procurement proceedings or give an unfair advantage to any person proposing to enter into a contract with the Division and shall be classified as protected records:

- (a) the names of individual selection committee scorers in relation to their individual scores or rankings; and
- (b) non-public financial statements.

R23-1-1504. Performance Evaluation.

(1) The Division shall evaluate the performance of the architectural or engineering firm and shall provide an opportunity for the using agency to comment on the Division's evaluation.

(2) This evaluation shall become a part of the record of that architectural or engineering firm within the Division. The architectural or engineering firm shall be provided a copy of its evaluation at the end of the project and may enter its response in the file.

(3) Confidentiality of the evaluation information shall be addressed as provided in Subsection R23-2-11(3).

R23-1-1601. Conduct.

Controversies and protests shall be conducted in accordance with the requirements set forth in Sections 63G-6a-1601 through 13G-6a-604. All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

R23-1-1602. Verification of Legal Authority.

A person filing a protest may be asked to verify that the person has legal authority to file a protest on behalf of the public or private corporation, governmental entity, sole proprietorship, partnership, or unincorporated association.

R23-1-1603. Intervention in a Protest.

(1) Application. This Rule contains provisions applicable to intervention in a protest, including who may intervene and the time and manner of intervention.

(2) Period of Time to File. After a timely protest is filed in accordance with the Utah Procurement Code, the Protest Officer shall notify awardees of the subject procurement and may notify others of the protest. A Motion to Intervene must be filed with the Protest Officer no later than ten days from the date such notice is sent by the Protest Officer. Only those Motions to Intervene made within the time prescribed in this Rule will be considered timely. The entity or entities who conducted the procurement and those who are the intended beneficiaries of the procurement are automatically considered

a Party of Record and need not file any Motion to Intervene.

(3) Contents of a Motion to Intervene. A copy of the Motion to Intervene shall also be mailed or emailed to the person protesting the procurement.

(4) Any Motion to Intervene must state, to the extent known, the position taken by the person seeking intervention and the basis in fact and law for that position. A motion to intervene must also state the person's interest in sufficient factual detail to demonstrate that:

(a) the person seeking to intervene has a right to participate which is expressly conferred by statute or by Commission rule, order, or other action;

(b) the person seeking to intervene has or represents an interest which may be directly affected by the outcome of the proceeding, including any interest as a:

- (i) consumer;
- (ii) customer;
- (iii) competitor;
- (iv) security holder of a party; or
- (v) the person's participation is in the public interest.

(5) Granting of Status. If no written objection to the timely Motion to Intervene is filed with the Protest Officer within seven calendar days after the Motion to Intervene is received by the protesting person, the person seeking intervention becomes a party at the end of this seven day period. If an objection is timely filed, the person seeking intervention becomes a party only when the motion is expressly granted by the Protest Officer based on a determination that a reason for intervention exists as stated in this Rule. Notwithstanding any provision of this Rule, an awardee of the procurement that is the subject of a protest will not be denied their Motion to Intervene, regardless of its content, unless it is not timely filed with the Protest Officer.

(6) Late Motions. If a motion to intervene is not timely filed, the motion shall be denied by the Protest Officer.

R23-1-1701. Statutory and Rule Requirements.

Appeals to a protest decision shall be conducted in accordance with the requirements set forth in Section 63G-6a-1701 through 63G-6a-1706, Utah Procurement Code. Utah Administrative Code Rules R33-17-101 through R33-17-105 shall also apply.

R23-1-1801. Process.

(1) A person who receives an adverse decision, or a procurement unit (the Division), may appeal a decision of a procurement appeals panel to the Utah Court of Appeals within seven days after the day on which the decision is issued.

(2) All appeals to the Utah Court of Appeals are subject to the provisions of the requirements set forth in Section 63G-6a-1801 through 63G-6a-1803.

(3) The Division may only appeal a procurement appeals panel decision in accordance with Section 63G-6a-1802(2).

R23-1-1901. Encouraged to Obtain Legal Advice From Legal Counsel.

(1) All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the Procurement Code.

(2) Part 19 of the Utah Procurement Code, Sections 63G-6a-901 through 63G-6a-1911 contain provisions regarding:

- (a) limitations on challenges of:
 - (i) a procurement;
 - (ii) a procurement process;
 - (iii) the award of a contract relating to a procurement;

- (iv) a debarment; or
- (v) a suspension; and
- (b) the effect of a timely protest or appeal;
- (c) the costs to or against a protester;
- (d) the effect of prior determinations by employees, agents, or other persons appointed by the procurement unit;
- (e) the effect of a violation found after award of a contract;
- (f) the effect of a violation found prior to the award of a contract;
- (g) interest rates; and
- (h) a listing of determinations that are final and conclusive unless they are arbitrary and capricious or clearly erroneous.

(3) Due to the complex nature of protests and appeals, any person involved in the procurement process, protest or appeal, is encouraged to seek advice from the person's own legal counsel.

R23-1-2001. General Provisions Related to Records.

General provisions related to records are in Part 20 of the Utah Procurement Code and in Rule R23-1-12.

R23-1-2101. Cooperative Purchasing.

Cooperative purchasing shall be conducted in accordance with the requirements set forth in Section 63G-6a-2105 and the Utah Administrative Code Rule R23-1. This Rule provides additional requirements and procedures and must be used in conjunction with the Utah Procurement Code.

R23-1-2102. State Cooperative Contracts.

(1) The Division shall obtain procurement items from state cooperative contracts whether statewide or regional unless the chief procurement officer determines, in accordance with Section 63G-6a-408(5)(b)(i), that it is in the best interest of the state to obtain an individual procurement item outside the state contract.

(2) In accordance with Section 63G-6a-2105, the Division, public entities, nonprofit organizations, and agencies of the federal government may obtain procurement items from state cooperative contracts awarded by the chief procurement officer.

R23-1-2201. Reserved.

Part 22 of Title 63G, Chapter 6a, the Utah Procurement Code, does not exist at this point in time. Rules R23-1-1 through R23-1-24 are designed to match the corresponding Part of the Utah Procurement Code. When Part 22 of the Utah Procurement Code contains statutory language, the Board will consider whether to prepare draft rules for the rulemaking process.

R23-1-2301. Reserved.

Part 23 of Title 63G, Chapter 6a, the Utah Procurement Code, does not exist at this point in time. Rules R23-1-1 through R23-1-24 are designed to match the corresponding Part of the Utah Procurement Code. When Part 23 of the Utah Procurement Code contains statutory language, the Board will consider whether to prepare draft rules for the rulemaking process.

R23-1-2401. Unlawful Conduct.

Unlawful conduct shall be governed in accordance with the requirements set forth in Sections 63G-6a-2401 through 2407. All definitions in the Utah Procurement Code shall apply to this Rule unless otherwise specified in this Rule. This administrative rule provides additional requirements and procedures and must be used in conjunction with the

Procurement Code.

R23-1-2402. Laws and Executive Orders Pertaining to Gifts, Meals, and Gratuities for Executive Branch Procurement Professionals.

(1) A Division employee classified as a "Procurement Professional" shall be governed by:

(a) Part 24 of the Utah Procurement Code, "Unlawful Conduct and Penalties."

(b) Executive Order EO/003/2010 issued by the Governor
(<http://www.rules.utah.gov/execdoks/2010/ExecDoc149415.htm>);

(c) Title 67, Part 16 "Utah Public Officers' and Employees' Ethics Act;"

(d) Section 76-8-103, "Bribery or Offering a Bribe;" and

(e) any other applicable law.

R23-1-2403. Laws and Executive Orders Pertaining to Gifts, Meals, and Gratuities for Executive Branch Employees.

(1) A Division employee not classified as a "Procurement Professional" shall be governed by:

(a) Executive Order EO/003/2010 issued by the Governor
(<http://www.rules.utah.gov/execdoks/2010/ExecDoc149415.htm>);

(c) Title 67, Part 16 "Utah Public Officers' and Employees' Ethics Act;"

(d) Section 76-8-103, "Bribery or Offering a Bribe;" and

(e) any other applicable law.

R23-1-2404. Socialization with Vendors and Contractors.

(1) A procurement professional shall not:

(a) participate in social activities with vendors or contractors that will interfere with the proper performance of the procurement professional's duties;

(b) participate in social activities with vendors or contractors that will lead to unreasonably frequent disqualification of the procurement professional from the procurement process; or

(c) participate in social activities with vendors or contractors that would appear to a reasonable person to undermine the procurement professional's independence, integrity, or impartiality.

(2) If an executive branch procurement professional participates in a social activity prohibited under R23-1-2404(1), or has a close personal relationship with a vendor or contractor, the procurement professional shall promptly notify their supervisor and the supervisor shall take the appropriate action, which may include removal of the procurement professional from the procurement or contract administration process that is affected.

R23-1-2405. Financial Conflict of Interests Prohibited.

(1) A procurement conflict of interest is a situation in which the potential exists for an executive branch employee's personal financial interests, or for the personal financial interests of a family member, to influence, or have the appearance of influencing, the employee's judgment in the execution of the employee's duties and responsibilities when conducting a procurement or administering a contract.

(2) In order to preserve the integrity of the State's procurement process, an executive branch employee may not take part in any procurement process, contracting or contract administration decision:

(a) relating to the employee or a family member of the employee; or

(b) relating to any entity in which the employee or a

family member of the employee is an officer, director or partner, or in which the employee or a family member of the employee owns or controls 10% or more of the stock of such entity or holds or directly or indirectly controls an ownership interest of 10% or more in such entity.

(3) If a procurement process, contracting or contract administration matter arises relating to the employee or a family member of the employee, the employee must advise his or her supervisor of the relationship, and must be recused from any and all discussions or decisions relating to the procurement, contracting or administration matter. The employee must also comply with all disclosure requirements in Utah Code Title 67 Chapter 16, Utah Public Officers' and Employees' Ethics Act.

R23-1-2406. Bias Participation Prohibitions.

(1) Division employees are prohibited from participating in any and all discussions or decisions relating to the procurement, contracting or administration process if they have a bias that would appear to a reasonable person to influence their independence in performing their assigned duties and responsibilities relating to the procurement process, contracting or contract administration or prevent them from fairly and objectively evaluating a proposal in response to a bid, RFP or other solicitation. This provision shall not be construed to prevent an employee from having a bias based on the employee's review of a response to the solicitation in regard to the criteria in the solicitation.

(2) If an executive branch employee has an impermissible bias under Rule R23-1-2406(1) above regarding an individual, group, organization, or vendor responding to a bid, RFP or other solicitation, the employee must make a written disclosure to the supervisor and the supervisor shall take appropriate action, which may include recusing the employee from any and all discussions or decisions relating to the solicitation, contracting or administration matter in question. This provision shall not be construed to prevent an employee from having a bias based on the employee's review of a response to the solicitation in regard to the criteria in the solicitation.

R23-1-2407. Professional Relationships and Social Acquaintances Not Prohibited.

(1) It is not a violation for an executive branch employee who participates in discussions or decisions relating to the procurement, contracting or administration process to have a professional relationship or social acquaintance with a person, contractor or vendor responding to a solicitation, or that is under contract with the State, provided that there is compliance with Rule R33-24-105, Rule R33-24-106, the Utah Public Officers' and Employees' Ethics Act, The Governor's Executive Order (EO 002 2014) "Establishing an Ethics Policy for Executive Branch Agencies and Employees," and other applicable State laws.

KEY: contracts, procurement, public buildings

March 3, 2015

63A-5-103 et seq.

Notice of Continuation December 18, 2014

63G-2-101 et seq.

63G-6-208(2)

R33. Administrative Services, Purchasing and General Services.**R33-26. State Surplus Property.****R33-26-101. State Surplus Property - General.**

This rule sets forth policies and procedures which govern the acquisition and disposition of state and federal surplus property, vehicles, and firearms. It applies to all state and local public agencies and eligible non-profit educational and health institutions when dealing with federal surplus property. It also applies to all state agencies unless specifically exempted by law and to the general public when dealing with state surplus property and the state surplus property contractor.

R33-26-102. Requirements.

Under the provisions of Section 63A, Chapter 2, Section 103, the division shall:

- (1) Except when a state surplus property contractor administers the state's program for disposition of state surplus property operate, manage, and maintain the state surplus property program;
- (2) When a state surplus property contractor administers the state's program for disposition of state surplus property, oversee the state surplus property contractor's administration of the state surplus property program.
- (3) Manage the federal surplus property program as the Utah State Agency for Surplus Property and in compliance with 41 CFR 102-37 and Public Law 94-519 through a State Plan of Operation. The standards and procedures governing the contract between the state and the federal government are contained in the Plan of Operation.
- (4) Manage the disposition of state owned vehicles.
- (5) Control the sale or transfer of firearms from state agencies and participating local agencies, as authorized in Section 63A, Chapter 2, Section 4.
- (6) Handheld devices/technology (not transferred from state agencies to public schools).

R33-26-103. Definitions.

- (1) Terms used in the Surplus Property Rules are defined in Section 63A-2-101.5.
- (2) In addition:
 - (a) "All-terrain type I vehicle" means any motor vehicle 52 inches or less in width, having an unladen dry weight of 1,500 pounds or less, traveling on three or more low pressure tires, having a seat designed to be straddled by the operator, and designed for or capable of travel over unimproved terrain;
 - (b) "All-terrain type II vehicle" means any other motor vehicle, not defined in Subsection (2), (11), or (22), designed for or capable of travel over unimproved terrain and includes a class A side-by-side vehicle. "All-terrain type II vehicle" does not include golf carts, any vehicle designed to carry a person with a disability, any vehicle not specifically designed for recreational use, or farm tractors as defined under Section 41-1a-102.
- (3) "Aircraft" means any contrivance now known or in the future invented, used, or designed for navigation of or flight in the air.
- (4) "Camper" means any structure designed, used, and maintained primarily to be mounted on or affixed to a motor vehicle that contains a floor and is designed to provide a mobile dwelling, sleeping place, commercial space, or facilities for human habitation or for camping.
- (5) "Division" means the Division of Purchasing and General Services within the Department of Administrative Services created under Section 63A-2-101.
- (6) "Farm tractor" means every motor vehicle designed and used primarily as a farm implement for drawing plows, mowing machines, and other implements of husbandry.

(7) "Firearm" means any state owned firearm, including any confiscated or seized firearm over which the state has disposal authority, and any firearm declared to be surplus property by a local subdivision.

(8) "Handgun" means any pistol or revolver.

(9) "Hunting or sporting rifle" means any long barreled shotgun or rifle manufactured for hunting or sporting purposes.

(10) "Licensed firearm dealer" means a firearms dealer licensed by the Federal Bureau of Alcohol, Tobacco and Firearms.

(11) "Motorboat" means any vessel propelled by machinery, whether or not the machinery is the principal source of propulsion.

(12) "Motorcycle" means a motor vehicle having a saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground.

(13) "Motor vehicle" means a self-propelled vehicle intended primarily for use and operation on the highways.

(14) "Off-highway vehicle" means any snowmobile, all-terrain type I vehicle, all-terrain type II vehicle, or motorcycle.

(15) As used in this section "Personal handheld electronic device":

(a) means an electronic device that is designed for personal handheld use and permits the user to store or access information, the primary value of which is specific to the user of the device; and,

(b) includes a mobile phone, pocket personal computer, personal digital assistant, wireless, or similar device.

(16) "Personal Watercraft" means a motorboat that is:

- (a) less than 16 feet in length;
- (b) propelled by a water jet pump; and
- (c) designed to be operated by a person sitting, standing or kneeling on the vessel, rather than sitting or standing inside the vessel.

(17)(a) "Pickup truck" means a two-axle motor vehicle with motive power manufactured, remanufactured, or materially altered to provide an open cargo area.

(b) "Pickup truck" includes motor vehicles with the open cargo area covered with a camper, camper shell, tarp, removable tarp, or similar structure.

(18) "Reconstructed vehicle" means every vehicle type required to be registered in this state that is materially altered from its original construction by the removal, addition, or substitution of essential parts, new or used.

(19)(a) "Recreational vehicle" means a vehicular unit other than a mobile home, primarily designed as a temporary dwelling for travel, recreational, or vacation use, that is either self-propelled or pulled by another vehicle.

(b) "Recreational vehicle" includes:

- (i) a travel trailer;
- (ii) a camping trailer;
- (iii) a motor home;
- (iv) a fifth wheel trailer; and
- (v) a van.

(20) "Road tractor" means every motor vehicle designed and used for drawing other vehicles and constructed so it does not carry a load either independently or any part of the weight of a vehicle or load this is drawn.

(21) "Sailboat" means any vessel having one or more sails and propelled by wind.

(22) "Semitrailer" means every vehicle without motive power designed for carrying persons or property and for being drawn by a motor vehicle and constructed so that some part of its weight and its load rests or is carried by another vehicle.

(23)(a) "Special mobile equipment" means every vehicle:

- (i) not designed or used primarily for the transportation

of persons or property;

- (ii) not designed to operate in traffic; and
- (iii) only incidentally operated or moved over the highways.

(b) "special mobile equipment" includes:

- (i) farm tractors;
- (ii) on or off-road motorized construction or maintenance equipment including backhoes, bulldozers, compactors, graders, loaders, road rollers, tractors, and trenchers;
- (iii) ditch-digging apparatus; and
- (iv) forklifts, warehouse equipment, golf carts, electric carts, etc.

(24) "Trailer" means a vehicle without motive power designed for carrying persons or property and for being drawn by a motor vehicle and constructed so that no part of its weight rests upon the towing vehicle.

(25) "Travel trailer," "camping trailer," or "fifth wheel trailer" means a portable vehicle without motive power, designed as a temporary dwelling for travel, recreational, or vacation use that does not require a special highway movement permit when drawn by a self-propelled motor vehicle.

(26) "Truck tractor" means a motor vehicle designed and used primarily for drawing other vehicles and not constructed to carry a load other than a part of the weight of the vehicle and load that is drawn.

(27) "USASP" means Utah State Agency for Surplus Property.

(28) "Vehicle" means the items identified and defined in Rule R33-26-103, except items (5), (7), (8), (9) (15), and (27), and includes all auxiliary equipment and components associated or attached to the vehicle and equipment used by the vehicle for its intended purpose. Examples of auxiliary equipment and components include snow plow blades, spreaders, sanders, vehicle fire extinguishers, emergency equipment, radios, truck bed racks and truck bed covers, generators, mounted welders, non-OEM, lights and light bars, etc.

(29) "Vessel" means every type of watercraft, other than a seaplane on the water, used or capable of being used as a means of transportation on water.

R33-26-201. Non-vehicle Disposition Procedures.

(1) State-owned non-vehicle personal property shall not be destroyed, sold, transferred, traded-in, traded, discarded, donated or otherwise disposed of unless the procedures set forth in this Rule are followed. State-owned non-vehicle personal property shall not be processed by the division.

(2) This rule applies to and includes any residue that may be remaining from agency cannibalization of property.

(3) When a department or agency of state government determines that state-owned non-vehicle personal property is in excess to current needs, it will:

(a) transfer the non-vehicle surplus property directly to another department or agency of the state without involvement of the division; or

(b) notify the state surplus property contractor that the department or agency has surplus property.

R33-26-202. Information Technology Equipment.

(1) For the purpose of this rule, Electronic Data Device means an electronic device capable of downloading, storing or transferring State-owned data. Electronic Data Devices include:

- (a) Computers;
- (b) Tablets (iPads, Surface Pro, Google Nexus, Samsung Galaxy, etc.);
- (c) Smart phones;

- (d) Personal Digital Assistants (PDAs);
- (e) Digital copiers and multifunction printers;
- (f) Flash drives and other portable data storage devices;

and

- (g) Other similar devices.

(2) The State has determined that the security risk of a potential data breach resulting from the improper disposal or sale of an electronic data device, as defined in this rule, outweigh the potential revenue that may be received by the State from the sale of an electronic data device deemed surplus property. Therefore, the State has adopted this Administrative Rule regarding the proper disposal of State-owned surplus electronic data devices:

(a) Each State agency shall ensure that all surplus State-owned electronic data devices are disposed of in accordance with the following procedures.

(b) Surplus State-owned electronic devices defined under this Rule may not be sold or gifted via on-line auction or any other means.

(c) Surplus State-owned electronic data devices must be disposed of through the vendor under contract with the State, unless a separate contractual agreement has been entered into with the manufacturer or supplier of the device for proper destruction and disposal.

(d) The Division of Purchasing shall enter into a contract with a vendor for the destruction and proper disposal of all State-owned surplus electronic data devices.

(e) Proper disposal includes:

(i) Recycling components and parts after the State-owned electronic data device has been destroyed to the point that State-owned data cannot be retrieved;

(ii) Disposal in a landfill approved for electronic waste after the State-owned electronic data device has been destroyed to the point that State-owned data cannot be retrieved; or

(iii) Computers, digital copiers and multifunction printers that have had the hard drive destroyed may be resold by the contractor.

(f) State agencies shall request assistance from the Department of Technology Services (DTS) to destroy the hard drives of computers and other State-owned surplus electronic data devices purchased through DTS prior to the agency transferring the devices to the vendor under contract with the State.

(g) State agencies shall contact the vendor under contract with the State to destroy and properly dispose of all other State-owned surplus electronic data communication devices.

(3) Subject to subsection (1) and (2), State-owned information technology equipment may be transferred directly to public institutions, such as schools and libraries, by the owning agency.

(4) Subject to subsection (1) and (2), pursuant to the provisions of Section 63A-2-407, state-owned information technology equipment may be transferred directly to non-profit entities for distribution to, and use by, persons with a disability as defined in Subsection 62A-5-101(9). However, interagency transfers and sales of surplus property to state and local agencies shall have priority over transfers under this subsection.

(5) Subject to subsection (1) and (2), except as it relates to a vehicle or federal surplus property, the transfer of surplus property from one agency directly to another does not require approval by the division, the director of the division, or any other person.

R33-26-203. Federal Surplus Property.

(1) Federal Surplus Property is not available for sale to the general public. Donation of federal surplus property shall

be administered in accordance with the procedures identified in the State Plan of Operation for the Federal Property Assistance Program.

(2) Public auctions of federal surplus property are authorized under certain circumstances and conditions. The division shall coordinate such auctions when deemed necessary or appropriate. Federal surplus property auctions are primarily conducted online, but are regulated and accomplished by the U.S. General Services Administration.

R33-26-204. Related Party Transactions.

(1) The division has a duty to the public to ensure that State-owned surplus property is disposed of in accordance with Section 63A-2. A conflict of interest may exist or appear to exist when a related party attempts to purchase surplus property.

(2) A related party is defined as someone who may fit into any of the following categories pertaining to the surplus property in question:

- (a) has purchasing authority;
- (b) has maintenance authority;
- (c) has disposition or signature authority;
- (d) has authority regarding the disposal price;
- (e) has access to restricted information; and
- (f) has perceived to be a related party using other criteria which may prohibit independence.

R33-26-205. Priorities.

(1) Public agencies are given priority for the purchase of state-owned surplus property.

(2) Property that is determined by the Division to be unique, in short supply or in high demand by public agencies may be held for a period of up to 30 days before being offered for sale to the general public through the state surplus property contractor.

(3) For this Rule, the entities listed below, in priority order, are considered to be public agencies:

- (a) state Agencies;
 - (b) state Universities, Colleges, and Community Colleges;
 - (c) other tax supported educational agencies or political subdivisions in the State of Utah including cities, towns, counties and local law enforcement agencies;
 - (d) other tax supported educational entities; then
 - (e) non-profit health and educational institutions.
- (4) State-owned personal property that is not purchased by or transferred to public agencies may be offered for public sale.

(5) The division shall make the determination as to whether property is subject to hold period. The decision shall consider the following:

- (a) the cost to the state;
- (b) the potential liability to the state;
- (c) the overall best interest of the state.

R33-26-301. Accounting and Reimbursement Procedures.

(1) The division will record and maintain records of all transactions related to the acquisition and sale of all federal surplus property.

(2) The division will require regular and detailed accounting by the state surplus property contractor of:

- (a) the receipt and sale of state surplus property;
- (b) the receipt and payment of any and all funds; and
- (c) ensure public transparency regarding the sale of state surplus property.

(3) The division may maintain a federal working capital reserve not to exceed one year's operating expenses. In the event the division accumulates funds in excess of the allowable working capital reserve, they will reduce the

Retained Earnings balance accordingly. The only exception is where the division is accumulating excess funds in anticipation of the purchase of new facilities or capital items. Prior to the accumulation of excess funds, the division must obtain the written approval of the Executive Director of the Department of Administrative Services.

R33-26-302. Reimbursement.

(1) After paying the amount owed to the state surplus property contractor, the division shall transfer the remaining money to the agency that requested the sale of the particular item in accordance with Title 63J, Budgetary Procedures Act.

(2) Vehicle reimbursements to state agencies from the sale of their vehicles will be made through the Division of Finance on interagency transfers or warrant requests. The division is authorized to deduct operating costs from the selling price of all vehicles. In all cases property will be priced to sale for fair market value. Items that are not marketable for whatever reason may be discounted in price or disposed of by abandonment, donation, or sold as scrap.

(3) Payment for vehicles, information technology equipment, federal surplus property, personal handheld devices, and firearms shall be as follows:

(a) payment received from public purchasers may be in the form of cash and/or certified funds, authorized bank credit cards, and personal checks. Personal checks may not be accepted for amounts exceeding \$200. Two-party checks shall not be accepted;

(b) payment received from governmental entities, school districts, special districts, and higher education institutions shall be in the form of agency or subdivision check or purchasing card;

(c) payment made by governmental entities, school districts, special districts, and higher education institutions shall be at the time of purchase and prior to removal of the property purchased; or

(d) the division director or designee may make exceptions to the payment provisions of this rule for good cause. A good cause exception requires a weighing of:

- (i) the cost to the state;
- (ii) the potential liability to the state; and
- (iii) the overall best interest of the state.

(4) The division shall initiate formal collection procedures in the event that a check from the general public, state subdivisions, or other agencies is returned to the division for "insufficient funds":

(a) in the event that a check is returned to the division is returned for "insufficient fund," the division may:

(i) prohibit the debtor from making any future purchases from the division until the debt is paid in full; and

(ii) have the division accountant send a certified letter to the debtor stating that the debtor has 15 days to pay the full amount owed with cash or certified funds, including any and all additional fees associated with the collection process, such as returned check fees; and if the balance is not paid within the 15 day period, the matter will be referred to the Office of State Debt Collection for formal collection proceedings.

(b) debts for which payments have not been received in full within the 15 day period referred to above, shall be assigned to the Office of State Debt Collection in accordance with statute.

R33-26-401. Public Sale of State-Owned Vehicles.

(1) State-owned excess vehicles may be purchased at any time by the general public, subject to any holding period that may be assigned by the division and subject to the division's operating days and hours.

(2) Federal surplus property auctions to the general public may be accomplished on occasions and subject to the

limitations as indicated previously.

(3) The frequency of public auctions, for either State-owned vehicles or federal surplus property will be regulated by current law as applicable, the volume of items held in inventory by the division, and the profitability of conducting auctions versus other approaches to disposing of surplus property.

(4) State-owned vehicles available for sale may not have any ancillary or component parts or equipment removed, destroyed, or detached, from the vehicle prior to sale without the approval of the division.

(5) State agencies are prohibited from removing ancillary or component parts or equipment from vehicles intended for surplus unless:

- (a) the state agency intends on using the ancillary or component parts or equipment on other agency vehicles;
- (b) the state agency in possession of the vehicle intends to transfer the ancillary or component parts or equipment to another state agency; or
- (c) the state agency has obtained prior approval from the division to remove ancillary or component parts or equipment from the vehicle intended for surplus.

R33-26-501. Surplus Firearms.

This subsection sets forth policies and procedures for disposing of surplus firearms from state agencies and participating local agencies, as authorized in Section 63A-2-4. This rule governs the destruction, sale, transfer, or donation of surplus firearms to any agency or to the general public.

R33-26-502. Procedures.

(1) All state owned firearms shall be disposed of under the general provisions of this Rule.

- (a) The sale of firearms directly to the general public by the division is prohibited.
- (b) Hunting and sporting rifles meeting Federal Firearms regulations may be sold only to firearms dealers licensed by the Federal Bureau of Alcohol, Tobacco and Firearms.
- (c) Except as provided in this subsection (c), handguns shall be transferred to the Utah State Public Safety Crime Lab for use or to be destroyed.
- (i) The owning agency may trade a handgun into a licensed firearm dealer for credit toward the current purchase of a new handgun.
- (ii) The division may authorize the sale of a handgun to a legally constituted law enforcement agency.
- (iii) The division may authorize the sale of a handgun to a POST certified individual if the owning agency submits a signed request that includes:
 - (A) the individual's name;
 - (B) the serial number of the handgun to be sold; and
 - (C) the signature of an authorized agent of the owning agency.

(2) All firearms retained by the division shall be in accordance with Federal Firearms regulations pursuant to Sections 921(a)(19) and 922(s) of Title 18, United States Code.

- (a) Written certification that surplus firearms meet federal firearms regulations shall be provided by the owning agency or a qualified armorer.
- (3) All firearms retained by the division shall be in good working condition.
- (a) Written certification specifying the condition of surplus firearms shall be provided by the owning agency or a qualified armorer.

R33-26-601. Utah State Agency for Surplus Property Adjudicative Proceedings.

As required by the Utah Administrative Procedures Act,

this Rule provides the procedures for adjudicating disputes brought before the division under the authority granted by Section 63A-2-401 and Section 63G-4, et seq.

R33-26-602. Proceedings to Be Informal.

All matters over which the division has jurisdiction including bid validity determination and sales issues, which are subject to Title 63G, Chapter 4, will be informal in nature for purposes of adjudication. The Director of the Division of Purchasing and General Services or his designee will be the presiding officer.

R33-26-603. Procedures Governing Informal Adjudicatory Proceedings.

- (1) No response need be filed to the notice of agency action or request for agency action.
- (2) The division may hold a hearing at the discretion of the director of the Division of Purchasing and General Services or his designee unless a hearing is required by statute. A request for hearing must be made within ten days after receipt of the notice of agency action or request for agency action.
- (3) Only the parties named in the notice of agency action or request for agency action will be permitted to testify, present evidence and comment on the issues.
- (4) A hearing will be held only after timely notice of the hearing has been given.
- (5) No discovery, either compulsory or voluntary, will be permitted except that all parties to the action shall have access to information and materials not restricted by law.
- (6) No person may intervene in an agency action unless federal statute or rule requires the agency to permit intervention.
- (7) Any hearing held under this rule is open to all parties.
- (8) Within thirty days after the close of any hearing, the director of the Division of Purchasing and General Services or his designee shall issue a written decision stating the decision, the reasons for the decision, time limits for filing an appeal with the director of the superior agency, notice of right of judicial review, and the time limits for filing an appeal to the appropriate district court.
- (9) The decision rendered by the Director of the Division of Purchasing and General Services or his designee shall be based on the facts in the division file and if a hearing is held, the facts based on evidence presented at the hearing.
- (10) The agency shall notify the parties of the agency order by promptly mailing a copy thereof to each at the address indicated in the file.
- (11) Whether a hearing is held or not, an order issued under the provisions of this rule shall be the final order and then may be appealed to the appropriate district court.

R33-26-701. State Surplus Property Contractor.

- (1) The state surplus contractor must be selected through a Request for Proposals that results in a term contract.
- (2) The contractor may sell state surplus property by auction, bid or other manner designed to get the best price available for the state surplus property.
- (3) The contractor may not engage in the sale of state surplus property in a manner that would constitute a conflict of interest.
- (4) The contractor must submit regular and detailed accounting to the division of:
 - (a) the receipt and sale of state surplus property; and
 - (b) the receipt and payment of funds by the contractor.
- (5) The contractor must ensure public transparency regarding the sale of state surplus property and is required to:

(a) post online information related to a sale or attempted sale of state surplus property that includes:

- (i) a detailed description of the item or items;
- (ii) the name of the state agency that requested the sale;
- (iii) the price at which the state surplus property was sold; and,

(iv) post the information within a period of time established by the division.

(6) The division may, through the contract with the state surplus contractor, require the state surplus contractor:

- (a) to store the state surplus property; or,
- (b) charge for the storage of state surplus property.

R33-26-801. Donation, Disposal, or Destruction of State Surplus Property.

(1) A state agency or department may donate to a charitable organization, destroy, or dispose of as waste any state surplus property that is worth less than \$30.00 without involvement of the division or state surplus property contractor if:

- (a) the state surplus property fails to sell at auction;
- (b) the cost of selling the state surplus property is greater or equal to the value of the state surplus property;
- (c) the state surplus property is no longer usable;
- (d) the state surplus property is damaged and either cannot be repaired or the cost of repair is greater than or equal to the value of the state surplus property in a repaired state; or
- (e) the state surplus property can be replaced for less than the cost of repairing the state surplus property.

**KEY: government purchasing, procurement rules, state surplus property, general procurement provisions
March 31, 2015**

63A-2

R68. Agriculture and Food, Plant Industry.**R68-1. Utah Bee Inspection Act Governing Inspection of Bees.****R68-1-1. Authority.**

Promulgated under the authority of Section 4-11-3.

R68-1-2. Registration.

Every owner or person coming into possession of one or more colonies of bees within the State of Utah shall register with the Department of Agriculture and Food in accordance with the provisions in Section 4-11-4.

R68-1-3. Apiary Identification.

Each apiary location whether permanent or temporary shall be identified by a sign showing the owner's registration number issued by the Utah Department of Agriculture and Food at least one inch in height, easily readable and displayed in a conspicuous location in the apiary; or similar identification conspicuously displayed on one or more hive bodies within the apiary. Any apiary not so identified shall be considered abandoned and shall be subject to seizure and destruction as provided for in Section 4-11-14.

R68-1-4. Assistance in Locating Apiaries.

All beekeepers shall personally assist the department or county bee inspectors in locating their apiaries, or provide accurate and detailed information as to location of all bee hives under their control or possession.

R68-1-5. Salvage Operations.

All salvage operations with respect to wax, hives and appliances from diseased colonies shall be performed in a tightly screened enclosure to prevent the entrance of bees according to the following procedure:

A. Frames and comb from the diseased hives shall be held for at least 30 minutes in boiling water (212 degrees F) before any wax is removed.

B. After removal from the boiling water the frames must be destroyed or boiled for a minimum of 20 minutes in a solution of lye water containing no less than 10 pounds of lye (Sodium Hydroxide) for each 100 gal. of water.

C. Hive bodies, supers, covers and bottom boards must be thoroughly scorched or boiled for a minimum of 20 minutes in the lye water solution.

KEY: beekeeping

1987

4-11-3

Notice of Continuation March 24, 2015

R70. Agriculture and Food, Regulatory Services.**R70-101. Bedding, Upholstered Furniture and Quilted Clothing.****R70-101-1. Authority.**

A. Promulgated Under Authority of Section 4-10-3.

B. Scope: The purpose of these rules is to designate the license fees, labeling, terms, definitions, nomenclature and conditions as commonly used and recognized in the manufacture, sale and distribution of bedding, upholstered furniture, quilted clothing products, and filling materials.

R70-101-2. General Requirements.

A. These rules shall apply to all persons, partnerships, corporations, limited liability companies, and associations engaged in the business of manufacturing, retailing, wholesaling, processing, repairing, and selling items of bedding, upholstered furniture, quilted clothing, and filling materials. These rules do not apply to persons who make or renovate upholstered furniture, clothing or bedding for their own use.

B. Foreign, out-of-state articles or materials sold in Utah. This rule shall apply to bedding, upholstered furniture, quilted clothing, and filling materials sold in Utah regardless of their point of origin.

R70-101-3. Definitions.

A. "Manufacture" means to make, process, or prepare from new or secondhand material, in whole or in part, any bedding, upholstered furniture, quilted clothing, or filling material for sale; but does not include isolated sales of such articles by persons who are not primarily engaged in the making, processing, or preparation of these articles. For the purpose of the enforcement of this rule, the term "manufacturer" shall mean a person who either by himself or through employees makes for the purpose of sale any bedding, upholstered furniture, quilted clothing, filling material, or any unit thereof.

B. "Non-resident" means a person licensed under these rules who does not have premises in the State of Utah.

C. "Old" means filling material or portion thereof which shows characteristics of aging through deterioration or changing from its original qualities.

D. "Person" means an individual, partnership, association, firm, auctioneer, trust, limited liability company, or corporation, and agents, servants and employees of them.

E. "Premises" means all places where bedding, upholstered furniture, quilted clothing, or filling material is sold, offered for sale, exposed for sale, stored, renovated or manufactured, and the delivery vehicles used in their transportation.

F. "Supply dealer" means a person who manufactures, processes or sells at wholesale any felt, batting, pads or other filling, loose in bags, in bales or in containers, concealed or not concealed, intended for use in bedding, upholstered furniture, or quilted clothing.

G. "Sell" or any of its variants includes any combination of the following: sale, offer, or expose for sale, barter, trade, deliver, rent, consign, lease, possess with the intent to sell or dispose of in any other commercial manner; but does not include any judicial, executor, administrator or guardian sale. The possession of any article of bedding, upholstered furniture, quilted clothing, or filling material defined in these rules, by any maker, dealer, or his agents or servants in the course of business, shall be presumptive evidence of intent to sell.

H. "Uniform Registry Number", "URN", or "state-issued registry number" means the number issued by a state to be used on the law tag of bedding, furniture, or filling materials to identify the manufacturing facility, person, or company

accepting responsibility for such products.

R70-101-4. License.

Except as otherwise provided in these rules, any person who advertises, solicits or contracts to manufacture, repair or wholesale any bedding, upholstered furniture, quilted clothing, or filling materials who either does the work himself or has others do it for him, shall secure the particular license for the particular type of work that he solicits or advertises that he does, regardless of whether he has a shop or factory. This license shall be obtained before such products are offered for sale in Utah.

A. Annual license fee. The fee imposed for each license granted under these rules shall be approved by the Legislature.

When the appropriate fee is not paid on or before January 1, the license shall become delinquent, and there shall be added to the fee a late penalty, as approved by the Legislature in the Departments schedule of fees.

B. Suspension or revocation of license and procedure. In addition to other remedies provided in this rule, the Department shall have the authority to suspend or revoke any registration or license required by this rule for any violation of their provisions. A suspension or revocation shall be handled as outlined in Section 4-1-5.

R70-101-5. Sanitation Requirements.

A. Use of unsanitary filling material. The premises, delivery equipment, machinery, appliances, and devices of all persons licensed under these rules shall at all times be kept free from refuse, dirt, contamination or insects and no person shall use in the making, repair or renovating of bedding, upholstered furniture, or quilted clothing any filling material:

1. that contains any bugs, vermin or filth;
2. that is unsanitary;
3. that contains burlap or other material that has been used for baling.

R70-101-6. Manufacturing, Distribution, Advertising, Labeling and Sale of Quilted Clothing.

A. This section establishes standards and procedures relating to quilted clothing. The department adopts by reference the Rules and Regulations under the Textile Fiber Products Identification Act, July 9, 1986 edition; under the Fur Products Labeling Act, July 4, 1980 edition; and under the Wool Products Labeling Act of 1939, July 9, 1986 edition; excepting that wherever conflicts arise, the state rule shall govern.

B. Articles of plumage-filled clothing shall meet the following requirements:

1. Articles labeled "Down" shall contain a minimum of 75% down and plumules. The minimum down cluster percentage must be listed.
2. Articles containing less than 75% down, shall label the percentages of down and feathers contained therein and shall contain at a minimum the percentage of "Down" printed on the tag.

R70-101-7. Manufacturer Identification and Tag Requirements.

A. The identification of a manufacturer, wholesaler, or supply dealer of quilted clothing or filling material which is to appear on the label and on the tag shall be the same as required in rule 19-20 of the Federal Textile Fiber Products Identification Act and Wool Products Labeling Act, and the Federal Trade Commission Rules and Regulations.

The form of identification used on labels and on the tags shall be the same supplied to the Department on the application for registration.

B. For articles of bedding and upholstered furniture, the law tag shall use the format adopted by the International Association of Bedding and Furniture Law Officials (IABFLO), as listed in the "Tagging Law Manual" of the International Sleep Products Association (ISPA). A copy of the current edition of the "Tagging Law Manual" is available for public inspection at the Utah Department of Agriculture and Food, 350 North Redwood Road, Salt Lake City, Utah.

1. Tags on articles manufactured wholly of new material shall be white in color.

2. Tags on articles manufactured in whole or in part of secondhand materials and tags for "Owners Own Material" shall be yellow.

3. Color of ink on tags shall be black.

4. Tags shall be made of material that cannot be torn or easily abraded, and shall be the required color on both surfaces.

5. All required information shall be clearly and legibly printed in English and printed on one side of the tag only.

6. Tags shall be firmly attached to the article(s) in a position easily visible for examination. Regulated products which are offered for sale in boxes or in some other packaging which makes the law tags attached to the products themselves inaccessible, shall reproduce a fully legible facsimile of the law tag on the outer container or covering.

7. No mark, label, printed matter, illustration, sticker or any other device shall be placed upon the tags in such a way as to cover the required information.

8. A single uniform registry number (URN), issued by the state in which the firm is first registered, shall be used on the law tag. The firm's license with the state that issued the URN must be kept current for the number to be valid for use on products sold or offered for sale in Utah.

C. Every firm doing business under more than one state-issued uniform registry number (URN) shall obtain a license for each number used on products that are offered for sale in Utah. (A change of suffix on a URN shall constitute a new number and require an additional license.)

D. Retailers selling used mattresses shall display such mattresses with a tag stating "USED" that is clearly visible to a customer.

1. Tags shall be yellow in color.

2. Tags shall be a minimum of three inches by six inches.

3. Font shall be a minimum of one inch in height.

4. Color of ink on tags shall be black.

R70-101-8. Generic Names, Grades, Descriptive Terms, and Definitions of Filling Material.

A. The filling material shall be described on the label and on the tag by the true generic name, grade, description term, or definitions of the filling material as accepted and approved by the Department. When more than one kind of filling material is used in a mixture, the percent by weight of each shall be listed in order of their predominance. Federal fiber tolerance standards are applicable, except as pertains to plumage products.

B. Blends may be described, if applicable, as under Section 14 in this rule. In the case of non-down and/or non-feather filled articles of quilted clothing, any fiber or groups of individual fibers present in an amount of less than 5% by weight, of the total fiber content may be designated only as "other fiber" or "other fibers".

C. When different filling materials are used in various parts of the garment, the areas of the garment shall be named, followed by the name of the filling material used in that area. Examples:

Body - 50% Down, 50% Feathers

Sleeves - Polyester Fiber

Pockets - Nylon Fiber

D. Use of trade names and non-generic terms to describe filling material(s) is prohibited.

R70-101-9. Use of Rubber Stamp or Stencil.

A rubber stamp or stencil may be used in lieu of a tag on articles having a smooth backing on which the imprint can be legibly and indelibly stamped, and on suitable surfaces of bales or containers of felt, batting, pads, or other filling material used or to be used in bedding, upholstered furniture, and quilted clothing products.

R70-101-10. Making or Selling Material or Parts.

A person shall not purchase, make, process, prepare, or sell, directly or indirectly, at wholesale or retail or otherwise, any filling material or other component parts to be used in bedding, upholstered furniture, or quilted clothing, unless such material is plainly tagged as described in this rule.

R70-101-11. Labeling of Foreign Articles.

Responsibility for labeling of unlabeled foreign-made bedding, upholstered furniture, quilted clothing, and filling material in compliance with this rule shall rest with the person selling the merchandise in Utah.

R70-101-12. Violation of This Rule.

A. It shall be a separate violation of this rule for each improperly labeled or tagged or unlabeled or untagged article of bedding, upholstered furniture, quilted clothing, or filling material made, sold, exposed or offered for sale, delivered, consigned, rented or possessed with intent to sell contrary to the provisions of this rule.

B. Defense. No person shall be guilty of a violation of this rule if he has received, from the person by whom the articles were manufactured or from whom they were received, a guarantee in good faith that the articles are not contrary to the provisions of these rules. The guarantee shall be in the form prescribed by the Federal Textile Fiber Products Identification Act, the Federal Wool Products Labeling Act and the Federal Trade Commission Rules and Regulations.

R70-101-13. Enforcement Procedures.

A. Removal of Inspector's Tag. Any person who removes, or causes to be removed, any tag or device placed upon any article of bedding, upholstered furniture, quilted clothing, or filling material, by an inspector in the performance of his official duties, is guilty of violation of this rule.

B. Failure to Produce Articles Condemned. The failure of any person to produce upon demand of an inspector any article that has been condemned and ordered held on inspection notice signed by the person, or an inspection notice that the person has refused to sign, is a violation of this rule.

C. Interfere, Hinder Inspector. No person shall interfere with, obstruct, or otherwise hinder any inspector of the Department in the performance of his duties.

D. Retailers are Responsible to:

1. ensure that any article of bedding, upholstered furniture, or filling material they sell is labeled with a uniform law tag;

2. ensure that quilted clothing tags list filling material(s) and the name or Registered Number (RN) of the manufacturer or distributor;

3. fully comply with the Department's laws and rules governing false and misleading advertisement;

4. and make sure that all manufacturers from whom they purchase products that come under the purview of the act, hold a valid license with the Department.

5. In addition, upon request of any representative of the Department, a retailer shall provide the Department with the identity of the manufacturer or wholesaler of any article of bedding, upholstered furniture, quilted clothing, or filling material sold by that retailer.

6. If the manufacturer or wholesaler so identified is not registered pursuant to this rule and fails or refuses to register upon notification by the Department, any article of bedding, upholstered furniture, quilted clothing, or filling material manufactured or wholesaled by the manufacturer or wholesaler and sold or offered for sale in this state may be withheld from sale until the manufacturer or wholesaler registers; provided, that in the event the manufacturer or wholesaler fails to register, the retailer may register in lieu of the manufacturer or wholesaler.

R70-101-14. Rules and Regulations for Filling Material.

A. All terms and definitions of all filling materials shall be those terms which have been submitted to and approved by IABFLO, except those terms and definitions listed in this rule.

B. The document entitled "Plumage Regulations", the 2001 edition, approved by IABFLO, is adopted and incorporated by reference within this rule.

C. Cleanliness of Filling Materials.

All filling materials shall be reasonably clean and free from extraneous material, dirt, dust, filth, epidermis, excreta, disagreeable odors, or other contamination.

"Cleanliness" shall mean the oxygen number of any filling material consisting of whole feathers, down, or a combination thereof; and the oxygen number of any filling material consisting of an admixture of feathers and down which contains five percent (5%) of crushed feathers shall not exceed 25 grams of oxygen per 100,000 grams of sample. (Oxygen number is considered to be the amount, by weight, of oxidizable matter such as blood, excreta, and/or fecal matter present.)

D. "Imperfect, irregular foam" shall mean any foam products which show major imperfections or that fall below the foam manufacturer's usual standards or specifications and must be stated on the tag as "imperfect" or "irregular" along with the generic name of the foam.

E. "Imperfect, irregular fibers" shall mean fibers that have imperfections or that fall below the fiber manufacturer's usual standards or specifications and must be stated on the tag as "imperfect" or "irregular" along with the generic name of the fiber.

F. The terms "Prime", "Super", "Northern" and other terms of similar import shall not be used unless the fill can be proved to be of superior quality and meet the terms of the qualifying statement. Industry shall be responsible for proving to the Department that the fill is superior to the industry standard rating of 550 cubic inches of fill power.

R70-101-15. Products Not Intended for Uses Subject to This Rule.

A. The Commissioner hereby excludes from this rule all textile fiber products related to quilted clothing except:

1. Articles of down, feather, or fiber filled clothing.
2. Down, feather, or fiber filled hats and hoods.
3. Down, feather, or fiber filled slippers and booties with fabric outer-covering.
4. Down, feather, or fiber filled gloves.
5. Bulk filling material used in the above.

KEY: quality control

October 22, 2014

Notice of Continuation March 16, 2015

4-10-3

R105. Attorney General, Administration.**R105-1. Attorney General's Selection of Outside Counsel, Expert Witnesses and Other Litigation Support Services.****R105-1-1. Purpose and Authority.**

A. The purpose of this rule is to provide the requirements for procurements that are managed by the Attorney General, including the hiring of outside counsel, expert witnesses, litigation support services and procurement items.

B. This rule is adopted pursuant to authority granted by the Utah Procurement Code and Section 67-5-32(1)(a), including authority to manage procurement of procurement items directly or by delegation of the Chief Procurement Officer of the Division of Purchasing of the Department of Administrative Services.

R105-1-2. Definitions.

Terms in this Rule R105-1 shall be as defined in the Utah Procurement Code. The definitions in Rule R33-1 also apply to this Rule R105-1, except in case of conflict, the definitions in this Rule R105-1 shall control. Additional definitions are provided below.

A. "Agency" means any department, division, agency, commission, board, council, committee, authority, institution, or other entity within the State government of Utah (see Utah Code Ann. Sec. 67-5-3).

B. "Attorney General" means the Attorney General of the State of Utah, or the Attorney General's designee.

C. "Emergency" means a determination by the Attorney General in writing that a provision of this Rule needs to be waived due to the need for timeliness, litigation deadlines, confidentiality, or other emergency circumstances.

D. "Expert witness" means a person whose knowledge, skill, experience, training or education in a scientific, technical, or other specialized area, would enable the person to give testimony under Rule 702 of the Utah Rules of Evidence.

E. "Litigation Support Services" includes any goods, services, software, or technology.

F. "Outside counsel" means an attorney or attorneys who are not, or a law firm whose attorneys are not, employed by the Attorney General's office, pursuant to Utah Code Ann. Sec. 67-5-7 et seq., which the Attorney General appoints, pursuant to Utah Code Ann. Sec. 67-5-5, to represent, provide legal advice, or counsel to an agency of the State. "Outside counsel" may or may not be designated as "Special Assistant Attorney General", as the Attorney General determines.

G. "Procurement item" or "Procurement items" means any goods, services, software or technology.

H. "Small purchase" means a purchase under Rule R105-1-7.

I. "Sole source" means a determination by the Attorney General, in writing, that the sole source requirements of the Utah Procurement Code and this Rule have been met.

J. "State" means the State of Utah.

R105-1-3. Special Considerations to Best Serve the Public.

A. This rule applies to the procurement and appointment of outside counsel, expert witnesses, litigation support services, litigation related consultants, as well as management software and services by the Attorney General.

B. In order to properly fulfill the responsibilities of the Office, the procurement of outside counsel, expert witnesses, litigation support services, litigation related consultants, as well as management software and services often requires that public notice of a particular procurement not be provided. The provisions of the Utah Procurement Code and this Rule must be met. Such a procurement must be processed as an emergency procurement or be a procurement that does not

require notice.

C. The Attorney General may select outside counsel, expert witnesses, professional litigation support services, litigation related consultants, as well as management software and services pursuant to any authorized process under the Utah Procurement Code. In any such selection process, it may be specified that the outside counsel is responsible for providing the expert witnesses or other litigation goods and services through the selection process for outside counsel and pursuant to the contract provisions with the Attorney General.

D. If a procurement item is not procured through the request for proposals, small purchases, prequalification and vendor list, sole source, or emergency provisions of this rule, the Attorney General may determine to use an Invitation for Bids or any other procurement process allowed by the Utah Procurement Code provided that the following applicable Utah laws are met:

1. The Utah Procurement Code; and

2. Administrative Rules of the Division of Purchasing and General Services, when such rules of the Division of Purchasing and General Services are referred to in this Rule R105-1, except as otherwise exempted or in conflict with this Rule R105-1.

E. The Attorney General may, in a multistate case involving other states as parties aligned with Utah, elect to enter into a fee sharing agreement in which each state contributes to a litigation fund that is used to purchase expert witnesses and/or other litigation support services including litigation related consultants, as well as management software and services, or through a similar group procurement agreement. The agreement shall be treated collectively as a sole source procurement of all goods and services purchased under the terms of the agreement.

F. The Attorney General may, in a multistate case involving other states as parties aligned with Utah, select outside counsel jointly with some or all of the other states as a sole source procurement. If a contingency fee (not based on hourly rates) is used in the multistate case, it shall not be subject to the fee limitations of Rule R105-1-11.

G. The Attorney General's office shall ensure that the procurement of outside counsel is supported by a determination by the Attorney General that the procurement is in the best interests of the state, in light of available resources of the Attorney General's office.

H. The Attorney General's office shall provide for the fair and equitable treatment of all potential providers of outside counsel, expert witnesses, and other litigation support services including, litigation related consultants, as well as management software and services consistent with the limitations and procedures set forth in this Rule R105-1.

I. The Attorney General's office shall ensure that fees for outside counsel, whether based on an hourly rate, contingency fee, or other arrangement, are reasonable and do not exceed industry standards.

R105-1-4. Available Procurement Processes.

(1) In General. Prior to any procurement for legal services, the Attorney General shall first determine which process under the Utah Procurement Code shall be used, including but not limited to, small purchase, prequalification and vendor list, sole source, emergency procurement, availability of a statewide or regional contract, invitation for bids, or request for proposals.

(2) Prequalification and Approved Vendor Lists. Rule R33-4-101 and R33-4-102 shall apply to the Prequalification of Potential Vendors and Thresholds for Approved Vendor Lists, except that the maximum threshold for procuring the services of a licensed attorney(s) shall be \$250,000.

R105-1-5. Invitation for Bids.

Any competitive sealed bidding (invitation for bids) or multiple stage bidding process may occur in accordance with Sections 63G-6a-601 through 63G-6a-612, as well as Rule R33-6.

R105-1-6. Request for Proposal Process.

A. The Request for Proposal process may be used in accordance with Sections 63G-6a-701 through 63G-6a-711. The process shall also be subject to Rule R33-7 except as otherwise specified in this Rule R105-1.

B. The Request for Proposal process may be issued in stages, or may be issued after a request for information or other procurement process allowed by the Utah Procurement Code or this Rule.

C. The Request for Proposal, shall contain, in addition to the requirements of Rule R33-7-102, at a minimum, the following information:

1. A description of the project.
2. Any fee arrangements.
3. The persons or entities being sought in the procurement, including whether an individual person, firm or association of firms may respond.
4. The qualification criteria and the relative importance of the criteria. Examples of criteria include:
 - a. Identification by name and experience of the proposed service provider(s);
 - b. A description of the duties and responsibilities of each person providing the service; and
 - c. The ability of the persons providing the service to meet the needs of the project, including the consideration of any association with other persons, expert witnesses or firms;
5. The Contractual Requirements, which may be accomplished by including a copy of the contract.
6. A request for a conflicts analysis, including potential conflicts of interest or other related matters concerning the offeror's ability to ethically perform the requested services.
7. Requirements regarding the date, time, place, form and method concerning the filing of the Response to the Request for Proposals.
8. A statement that the Attorney General reserves the right to reject late-filed or nonconforming proposals.
9. A statement that the Attorney General reserves the right to reject all proposals. The Attorney General also reserves the right to modify or cancel the Request for Proposal Process and may or may not initiate a new Request for Proposal Process for the particular procurement matter.
- D. Public notice of the Request for Proposals shall be provided in accordance with the Utah Procurement Code.
- E. The award process, including notice of award, shall be made by the Attorney General in accordance with the Utah Procurement Code and this Rule.
- F. A record of the procurement shall be made in accordance with the Utah Procurement Code and this Rule, including Rule R105-1-14.
- G. In any selection process for outside counsel, it may be specified that the outside counsel is responsible for providing the expert witnesses or other litigation goods and services including litigation related consultants, as well as management software and services through the outside counsel's selection process and pursuant to the contract provisions with the Attorney General.
- H. Minimum scores for any of the criteria may be used.

R105-1-7. Small Purchases.

A. Small Purchases shall be conducted in accordance with the Utah Procurement Code and Rule R33-4-104, except that the maximum thresholds for small purchases shall be as described in this Rule R105-1-7.

B. For Outside Counsel, litigation related consultants, management software and services, as well as expert witnesses, the small purchase maximum threshold is \$250,000. A written justification statement shall be filed explaining the reason(s) for selection of the particular attorney, law firm or expert witness for the particular matter.

C. For the selection of litigation support services that are not covered under Rule R105-1-7(B), including but not limited to court reporting, litigation related copying and printing services, the small purchase maximum threshold is \$50,000. For a purchase between \$2500 and \$50,000, a minimum of two quotes shall be obtained or there shall be developed a rotation system of qualified persons or firms that meet the qualifications for the service. For any purchase of \$2500 or less, a direct award may be made.

D. The Attorney General may make such other small purchases delegated to the Attorney General by the Chief Procurement Officer pursuant to the Utah Procurement Code.

E. Under Section 63G-6a-408(3), a threshold stated in this Rule may be exceeded if the Attorney General (not a designee) or a person specifically designated in writing by the Attorney General gives written authorization to exceed the threshold that includes the reasons for exceeding the threshold.

R105-1-8. Sole Source.

A. Sole Source procurement shall be conducted in accordance with the requirements set forth in Section 63G-6a-802 of the Utah Procurement Code.

B. Unless the Attorney General determines that a publication of a sole source shall be published, sole sourced procurement items under this Rule need not be published regardless of cost, all of which is in accordance with Section 63G-6a-802(4)(b)(ii).

R105-1-9. Emergency Procurements and Waiver of Requirements.

A. Emergency procurements shall be conducted in accordance with the requirements set forth in Section 63G-6a-803 of the Utah Procurement Code and Rule R33-8-401.

B. An emergency procurement is a procurement procedure where the Attorney General does not need to use a standard procurement process.

C. An emergency procurement may only be used when an emergency exists as defined in this Rule.

D. Emergency procurements are limited to those procurement items necessary to mitigate the emergency.

E. While a standard procurement process is not required under an emergency procurement, when practicable, the Attorney General should seek to obtain as much competition as possible through the use of phone quotes, internet quotes, limited invitations to bid, or other selection methods while avoiding harm, or risk of harm, to the public health, safety, welfare, property or impairing the ability of a public entity to function or perform required services.

F. The Attorney General shall make a written determination documenting the basis for the emergency and the selection. A record of the determination and selection shall be kept in the contract file. The documentation may be made after the emergency condition has been alleviated.

R105-1-10. Confidentiality.

Except when an emergency exists under Rule R105-1-9 and in accordance with applicable law, where public inspection may be delayed until such time as the cause for the emergency no longer exists, the following shall be met:

- A. Protected Records.
 1. The following are protected records and may be redacted subject to the procedures described below in

accordance with the Governmental Records Access and Management Act (GRAMA) Title 63G, Chapter 2 of the Utah Code:

- a. Trade Secrets, as defined in Section 13-24-2;
 - b. Commercial information or non-individual financial information subject to the provisions of Section 63G-2-305(2); or
 - c. Other Protected Records under GRAMA.
2. Process For Requesting Non-Disclosure. Any person requesting that a record be protected shall include with the bid/proposal or submitted document:
- a. a written indication of which provisions of the bid/proposal or submitted document are claimed to be considered for business confidentiality or as a protected record (including trade secrets or other reasons for non-disclosure under GRAMA); and
 - b. a concise statement of the reasons supporting each claimed provision of business confidentiality or as a protected record.
 - c. Pricing may not be classified as business confidential and will be considered public information.
 - d. An entire set of bidding documents or proposal documents may not be designated as "PROTECTED", "CONFIDENTIAL" or "PROPRIETARY" and shall be considered non-responsive unless the offeror removes the designation.
 - e. This term bid or proposal for purposes of this Rule shall apply to any document submitted to the Attorney General for purposes of a procurement matter.

B. Notification.

- 1. A person who complies with this Rule R105-1-10 shall be notified by the Attorney General's office prior to the public release of any information for which a claim of confidentiality has been asserted.
- 2. Except as provided by court order, the Attorney General's office to whom the request for a record is made under GRAMA, may not disclose a record claimed to be protected under this Rule but which the Attorney General's Office or State Records Committee determines should be disclosed until the period in which to bring an appeal expires or the end of the appeals process, including judicial appeal, is reached. This Rule does not apply where the claimant, after notice, has waived the claim by not appealing or intervening before the State Records Committee. To the extent allowed by law, the parties to a dispute regarding the release of a record may agree in writing to an alternative dispute resolution process.
- 3. Any allowed disclosure of public records submitted in the request for proposals process will be made only after the selection of the successful offeror(s) has been made public in compliance with Section 63G-6a-709.5.

C. Publicizing Awards.

- 1. In addition to the requirements of Section 63G-6a-709.5, the following shall be disclosed after receipt by the Attorney General's Office of a GRAMA request and payment of any lawfully enacted and applicable fees:
 - a. the contract(s) entered into as a result of the selection and the successful proposal(s), except for those portions that are to be non-disclosed under this Rule or State law;
 - b. unsuccessful proposals, except for those portions that are to be non-disclosed under this Rule or State law;
 - c. the rankings of the proposals;
 - d. the names of the members of any evaluation committee members (reviewing authority);
 - e. the final scores used by the evaluation committee to make the selection, except that the names of the individual scorers shall not be associated with their individual scores or rankings; and
 - f. the written justification statement supporting the

selection, except for those portions that are to be non-disclosed under this Rule or State law.

2. After due consideration and public input, the following has been determined by the Procurement Policy Board and the Attorney General's Office to impair governmental procurement proceedings or give an unfair advantage to any person proposing to enter into a contract or agreement with a governmental entity, and, to the extent allowed by law, will not be disclosed by the Attorney General's Office at any time to the public including under any GRAMA request:

- a. the names of individual scorers/evaluators in relation to their individual scores or rankings;
- b. any individual scorer's/evaluator's notes, drafts, and working documents;
- c. non-public financial statements; and
- d. past performance and reference information, which is not provided by the offeror and which is obtained as a result of the efforts of the Attorney General's Office. To the extent such past performance or reference information is included in the written justification statement, the justification statement is still subject to public disclosure.

3. In regard to an Invitation for bids issued by the Attorney General's Office, the Attorney General's Office shall, on the day on which the award of a contract is announced, make available to each bidder and to the public, a notice that includes:

- a. the name of the bidder to which the contract is awarded and the price(s) of the procurement item(s); and
- b. the names and the prices of each bidder to which the contract is not awarded.

R105-1-11. Special Provisions regarding Procurement of Outside Counsel.

A. The Attorney General shall not enter into a contract for outside counsel unless the following requirements are met throughout the contract period and any extensions thereof:

1. The Attorney General shall review the proposed fee arrangement to hire outside counsel to ensure that there is a reasonable, good faith legal basis to pursue the litigation in the interest of the citizens of the State, and ensure that fees for outside counsel, whether based on an hourly rate, contingency fee, or other arrangement, are reasonable and consistent with industry standards.

2. The Attorney General shall retain oversight and control over the course and conduct of the litigation or anticipated litigation;

3. The Attorney General shall designate a member of the Attorney General's Office to personally oversee the litigation;

4. The Attorney General shall retain veto power over any decisions made by outside counsel, and no lawsuit will be filed, or party added to or served with process in any lawsuit, by outside counsel, without express written permission of the Attorney General;

5. The Attorney General shall be apprised of, attend and/or participate in all settlement offers or conferences; and

6. Decisions regarding settlement of the case shall be made by the Utah Attorney General and not the outside counsel, provided that the Attorney General may give outside counsel a reasonable range of specific settlement authority in writing, within which outside counsel is authorized to settle the case.

B. Every contingency fee contract for outside counsel shall be reasonable and not exceed industry standards for the type of case and level of expertise needed. Unless subject to the Opt-Out Provisions of Rule R105-1-11 C or an exception under Rule R105-1-11 D, contingency fees (not based on hourly rates) paid by the State of Utah shall be no greater than:

1. 25 percent up to a total of \$25,000,000 recovered;
2. 10 percent for any amount in excess of \$25,000,000 recovered; and
3. A total maximum contingency fee paid by the State of Utah to not exceed \$50,000,000.

C. Opt-out.

1. A contingency fee contract in excess of the limits set forth in Rule R105-1-11 B 1 through Rule R105-1-11 B 4, or that otherwise differs materially from any limitations contained in this Rule R105-1, may only be entered into upon a written finding by the Attorney General that the higher fee or different terms are appropriate given the needs of the case, reasonable and do not exceed industry standards given the nature of the case, and that the contract will not encourage unwarranted high risk litigation that is not in the interests of the citizens of the State. This written finding shall be posted on the Attorney General's website. The written finding may be filed at any time, including, but not limited to, before or after the filing of a protest or any other objection, claim or litigation regarding the procurement.

2. The Attorney General shall provide the written finding that the higher fee is appropriate to the Governor at least seven calendar days before the contingency fee contract is to be signed, except when an emergency exists under Rule R105-1-9, in which case the Attorney General shall, if time permits given the emergency, provide the written finding one day before the contingency fee contract is to be signed.

3. If the Governor so requests prior to the contingency fee contract being signed, the Attorney General shall call a meeting of all Division Directors in the Attorney General's Office to review the Attorney General's written finding. The contract shall only be signed if at least two thirds of the Division Directors whose Divisions are not directly involved in the procurement agree that the higher fee or different terms are in the interests of the citizens of the state. Some Directors may participate by electronic means.

D. Exceptions: This Rule R105-1-11 does not apply to the hiring of counsel for any of the following:

1. Debt collection or restitution cases;
2. Legal advice or litigation services related to international goods or services;
3. Legal advice or litigation services related to matters involving death or personal injury;
4. Bond counsel, disclosure counsel, or other similar counsel involved in the issuance of debt instruments by the State;
5. A multistate case under Rule R105-1-3 E or F; or
6. As otherwise provided in Utah Code, including Section 26-19-7(2)(b)(ii), wherein the Office of Recovery Services pays a contingency fee of 33.3% in Medicaid reimbursement cases.

E. Notwithstanding any other provision of this Rule R105-1-11, the solicitation for outside counsel may provide a lower fee limitation and/or provide for weights and scoring of the proposed fees in accordance with the Utah Procurement Code, which will allow for a competitive process and may provide for fees below the limitations set forth in this Rule.

R105-1-12. Transparency in Contingency Fee Contracts with Outside Counsel.

A. Except as otherwise provided by GRAMA, applicable law, Rules of Professional Conduct or this Rule, a copy of the executed contract with outside counsel shall be made available for public inspection in accordance with GRAMA.

B. Any payment by the Attorney General under a contingency fee contract shall be made available for public inspection in accordance with GRAMA.

C. Upon request of the President of the Utah Senate or

Speaker of the Utah House of Representatives, the Attorney General shall make available all contracts for hiring outside counsel on a contingency fee basis in the preceding year from the date of the request as well as any known names of the parties to the legal matter, the amount of any recovery and the amount of any contingency fee paid. Notwithstanding this, the Attorney General may withhold information that is confidential under GRAMA, Rules of Professional Conduct or applicable law unless the Attorney General determines that such release of information can lawfully be provided to the President of the Utah Senate or Speaker of the Utah House of Representatives and is adequately assured of confidentiality through a confidentiality agreement or similar document.

R105-1-13. Contracts.

Those awarded a contract under this Rule shall be required to enter into a written contract with the Attorney General. The written contract shall contain all material terms set forth in:

A. The final procurement documents issued by the Utah Attorney General;

B. The provisions in documents submitted by the provider to the extent such provisions are accepted by the Attorney General;

C. A termination for cause and a termination for convenience clause; and

D. Any terms required by law, whether by the constitutions, statutes, or rules or regulations of the United States or the State of Utah.

R105-1-14. Retention and Non-availability of Files.

A. All proposals submitted to the Attorney General under this rule become the property of the State of Utah and the office of the Attorney General.

B. All information in all proposals shall be placed in a file relating to the project for which the proposal was submitted. Each file shall contain:

1. If applicable, a copy of all written determinations of the Attorney General required by the Utah Procurement Code or this Rule;

2. A copy of the procurement documents and any written documentation related to notification requirements; and

3. All responses to procurements and modifications, in writing, to any procurement if those modifications have been negotiated by the Attorney General.

4. All records shall be maintained or disposed of in accordance with Part 20 of the Utah Procurement Code.

R105-1-15. Cancellations, Rejections, and Debarment.

Cancellations, rejections and debarments shall be subject to the provisions of the Utah Procurement Code and, except as otherwise provided in this Rule R105, Rule R33-9.

R105-1-16. Preferences.

Preferences shall be subject to the provision of the Utah Procurement Code, and except as otherwise provided in this Rule R105, Rule R33-10.

R105-1-17. Bond and Security.

Any bonds or security shall comply with Part 11 of the Utah Procurement Code and Rule R33-11.

R105-1-18. Terms and Conditions, Contracts, Multiple Year, Multiple Award, Change Orders and Costs.

There shall be compliance, as applicable, with Part 12 of the Utah Procurement Code and Rule R33-12.

R105-1-19. Controversies and Protests.

Part 16 of the Utah Procurement Code shall apply as well as Rule R33-16.

R105-1-20. Procurement Appeals Board, Appeals to Court and Court.

Parts 17, 18 and 19 of the Utah Procurement Code shall apply as well as Rules R33-17, R33-18 and R33-19.

R105-1-21. Interaction between Procurement Units.

Part 21 of the Utah Procurement Code shall apply as well as Rule R33-21.

R105-1-22. Unlawful Conduct and Penalties.

There shall be compliance with Part 24 of the Utah Procurement Code and Rule R33-24.

KEY: Attorney General, litigation support, outside counsel, expert witnesses
March 26, 2015

Art VII Sec 16
67-5
63G-6

R156. Commerce, Occupational and Professional Licensing.**R156-24b. Physical Therapy Practice Act Rule.****R156-24b-101. Title.**

This rule is known as the "Physical Therapy Practice Act Rule".

R156-24b-102. Definitions.

In addition to the definitions in Title 58, Chapters 1 and 24b, as used in Title 58, Chapters 1 and 24b or this rule:

(1) "A recognized accreditation agency", as used in Subsections 58-24b-302(1)(c) and (2)(c), means a college or university:

(a) accredited by CAPTE; or
(b) a foreign education program which is equivalent to a CAPTE accredited program as determined by FSBPT's Foreign Credentialing Commission on Physical Therapy.

(2) "Credential evaluation", as used in Subsections R156-24b-302a(2) and (3), means the appropriate Course Work Tool (CWT) adopted by the Federation of State Boards of Physical Therapy. The appropriate CWT means the CWT in place at the time the foreign educated physical therapist or physical therapist assistant graduated from the physical therapy program.

(3) "CAPTE" means Commission on Accreditation in Physical Therapy Education.

(4) "FSBPT" means the Federation of State Licensing Boards of Physical Therapy.

(5) "Joint mobilization", as used in Subsection 58-24b-102(14)(d), means passive and active movements of the joints of a patient, including the spine, to increase the mobility of joint systems; but, does not include specific vertebral adjustment and manipulation of the articulation of the spine by those methods or techniques which are generally recognized as the classic practice of chiropractic.

(6) "Routine assistance", as used in Subsections 58-24b-102(10) and 58-24b-401(3)(b) means:

(a) engaging in assembly and disassembly, maintenance and transportation, preparation and all other operational activities relevant to equipment and accessories necessary for treatment; and

(b) providing only that type of elementary and direct patient care which the patient and family members could reasonably be expected to learn and perform.

(7) "Supportive personnel", as used in Subsection R156-24b-503(1), means a physical therapist assistant or a physical therapy aide and does not include a student in a physical therapist or physical therapist assistant program.

(8) "Unprofessional conduct" as defined in Title 58, Chapters 1 and 24b, is further defined, in accordance with Subsection 58-1-203(1)(e), in Section R156-24b-502.

R156-24b-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 24b.

R156-24b-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.

R156-24b-302a. Qualifications for Licensure - Education Requirements.

(1) In accordance with Subsection 58-24b-302(1)(c), the accredited school of physical therapy for a physical therapist shall be accredited by CAPTE at the time of graduation.

(2) In accordance with Subsection 58-24b-302(3), an applicant for licensure as a physical therapist who is educated

outside the United States whose degree was not accredited by CAPTE shall document that the applicant's education is equal to a CAPTE accredited degree by submitting to the Division a credential evaluation from the Foreign Credentialing Commission on Physical Therapy. Only educational deficiencies in pre-professional subject areas may be corrected by completing college level credits in the deficient areas or by passing the College Level Examination Program (CLEP) demonstrating proficiency in the deficient areas. Pre-professional subject areas include the following:

- (a) humanities;
- (b) social sciences;
- (c) liberal arts;
- (d) physical sciences;
- (e) biological sciences;
- (f) behavioral sciences;
- (g) mathematics; or
- (h) advanced first aid for health care workers.

(3) In accordance with Subsection 58-24b-302(2), a physical therapist assistant shall complete one of the following CAPTE accredited physical therapy education programs:

- (a) an associates, bachelors, or masters program; or
- (b) in accordance with Section 58-1-302, an applicant for a license as a physical therapist assistant who has been licensed in a foreign country whose degree was not accredited by CAPTE shall document that the applicant's education is substantially equivalent to a CAPTE accredited degree by submitting to the Division a credential evaluation from the Foreign Credentialing Commission on Physical Therapy. Only educational deficiencies in pre-professional subject areas may be corrected by completing college level credits in the deficient areas or by passing the College Level Examination Program (CLEP) demonstrating proficiency in the deficient areas. Pre-professional subject areas include the following:
 - (a) humanities;
 - (b) social sciences;
 - (c) liberal arts;
 - (d) physical sciences;
 - (e) biological sciences;
 - (f) behavioral sciences;
 - (g) mathematics; or
 - (h) advanced first aid for health care workers.

(4) An applicant who has met all requirements for licensure as a physical therapist except passing the FSBPT National Physical Therapy Examination-Physical Therapist may apply for licensure as a physical therapist assistant.

R156-24b-302b. Qualifications for Licensure - Examination Requirements.

(1) In accordance with Subsections 58-24b-302(1)(e), (2)(e) and (3)(e), each applicant for licensure as a physical therapist or physical therapist assistant shall pass the FSBPT's National Physical Therapy Examination with a passing score as established by the FSBPT, after submitting proof of graduation from a professional physical therapist education program that is accredited by a recognized accreditation agency. A passing score on the FSBPT's National Physical Therapy Examination shall be verified through a score transfer from the FSBPT.

(2) An applicant for licensure as a physical therapist who fails the FSBPT National Physical Therapy Examination-Physical Therapist is eligible to sit for the FSBPT National Physical Therapy Examination-Physical Therapist Assistant after submitting an application for licensure as a Physical Therapist Assistant.

R156-24b-303a. Renewal Cycle - Procedures.

(1) In accordance with Subsection 58-1-308(1), the renewal date for the two-year renewal cycle applicable to licensees under Title 58, Chapter 24b is established by rule in Section R156-1-308a.

(2) Renewal procedures shall be in accordance with Section R156-1-308c.

R156-24b-303b. Continuing Education.

(1) Required Hours. In accordance with Subsection 58-24b-303(2), during each two year renewal cycle commencing on June 1 of each odd numbered year:

(a) A physical therapist shall be required to complete not fewer than 40 contact hours of continuing education of which a minimum of three contact hours must be completed in ethics/law.

(b) A physical therapist assistant shall be required to complete not fewer than 20 contact hours of continuing education of which a minimum of three contact hours must be completed in ethics/law.

(c) Examples of subjects to be covered in an ethics/law course for physical therapists and physical therapist assistants include one or more of the following:

- (i) patient/physical therapist relationships;
- (ii) confidentiality;
- (iii) documentation;
- (iv) charging and coding;
- (v) compliance with state and/or federal laws that impact the practice of physical therapy; and
- (vi) any subject addressed in the American Physical Therapy Association Code of Ethics or Guide for Professional Conduct.

(d) The required number of contact hours of continuing education for an individual who first becomes licensed during the two year renewal cycle shall be decreased in a pro-rata amount.

(e) The Division may defer or waive the continuing education requirements as provided in Section R156-1-308d.

(2) A continuing education course shall meet the following standards:

(a) Time. Each contact hour of continuing education course credit shall consist of not fewer than 50 minutes of education. Licensees shall only receive credit for lecturing or instructing the same course up to two times. Licensees shall receive one contact hour of continuing education for every two hours of time spent:

- (i) lecturing or instructing a course;
- (ii) in a post-professional doctorate or transitional doctorate program; or
- (iii) in a post-professional clinical residency or fellowship approved by the American Physical Therapy Association.

(b) Course Content and Type. The course shall be presented in a competent, well organized, and sequential manner consistent with the stated purpose and objective of the course.

(i) The content of the course shall be relevant to the practice of physical therapy and shall be completed in the form of any of the following course types:

- (A) department in-service;
- (B) seminar;
- (C) lecture;
- (D) conference;
- (E) training session;
- (F) webinar;
- (G) internet course;
- (H) distance learning course;
- (I) journal club;
- (J) authoring of an article or textbook publication;
- (K) poster platform presentation;

(L) specialty certification through the American Board of Physical Therapy Specialties;

(M) post-professional clinical residency or fellowship approved by the American Physical Therapy Association;

(N) post-professional doctorate from a CAPTE accredited program;

(O) lecturing or instructing a continuing education course; or

(P) study of a scholarly peer-reviewed journal article.

(ii) The following limits apply to the number of contact hours recognized in the following course types during a two year license renewal cycle:

(A) a maximum of 40 contact hours for initial specialty certification through the American Board of Physical Therapy Specialties (ABPTS);

(B) a maximum of 40 contact hours for hours spent in a post-professional doctorate or transitional doctorate CAPTE accredited program;

(C) a maximum of 40 contact hours for hours spent in a post-professional clinical residency or fellowship approved by the American Physical Therapy Association;

(D) a maximum of half of the number of contact hours required for renewal for lecturing or instructing in courses meeting these requirements;

(E) a maximum of ten percent of the number of contact hours required for renewal for supervision of a physical therapist or physical therapist assistant student in an accredited college program and the licensee shall receive one contact hour of credit for every 80 hours of clinical instruction;

(F) a maximum of 15 contact hours required for renewal for serving as a clinical mentor for a physical therapy residency or fellowship training program at a credentialed program and the licensee shall receive one contact hour of credit for every ten hours of residency or fellowship;

(G) a maximum of half of the number of contact hours required for renewal for online or distance learning courses that include examination and issuance of a completion certificate;

(H) a maximum of 12 contact hours for authoring a published, peer-reviewed article;

(I) a maximum of 12 contact hours for authoring a textbook chapter;

(J) a maximum of ten contact hours for personal or group study of a scholarly peer-reviewed journal article;

(K) a maximum of six contact hours for authoring a non-peer reviewed article or abstract of published literature or book review; and

(L) a maximum of six contact hours for authoring a poster or platform presentation.

(c) Provider or Sponsor. The course shall be approved by, conducted by, or under the sponsorship of one of the following:

- (i) a recognized accredited college or university;
- (ii) a state or federal agency;
- (iii) a professional association, organization, or facility involved in the practice of physical therapy; or
- (iv) a commercial continuing education provider providing a course related to the practice of physical therapy.

(d) Objectives. The learning objectives of the course shall be clearly stated in course material.

(e) Faculty. The course shall be prepared and presented by individuals who are qualified by education, training, and experience.

(f) Documentation. Each licensee shall maintain adequate documentation as proof of compliance with this Section, such as a certificate of completion, school transcript, course description, or other course materials. The licensee shall retain this proof for a period of three years after the end

of the renewal cycle for which the continuing education is due.

(i) At a minimum, the documentation shall contain the following:

- (A) the date of the course;
- (B) the name of the course provider;
- (C) the name of the instructor;
- (D) the course title;
- (E) the number of contact hours of continuing education credit; and
- (F) the course objectives.

(ii) If the course is self-directed, such as personal or group study or authoring of a scholarly peer-reviewed journal article, the documentation shall contain the following:

- (A) the dates of study or research;
- (B) the title of the article, textbook chapter, poster, or platform presentation;
- (C) an abstract of the article, textbook chapter, poster, or platform presentation;
- (D) the number of contact hours of continuing education credit; and
- (E) the objectives of the self-study course.

(6) Extra Hours of Continuing Education. If a licensee completes more than the required number of contact hours of continuing education during the two-year renewal cycle specified in Subsection (1), up to ten contact hours of the excess may be carried over to the next two year renewal cycle. No education received prior to a license being granted may be carried forward to apply towards the continuing education required after the license is granted.

R156-24b-305. Temporary Licensure.

(1) In accordance with Subsection 58-1-303(1), the Division may issue a temporary physical therapist or temporary physical therapist assistant license to a person who meets all qualifications for licensure as a physical therapist or physical therapist assistant except for the passing of the required examination, if the applicant:

- (a) submits a complete application for licensure as a physical therapist or physical therapist assistant except the passing of the NPTE examination;
- (b) is a graduate of a CAPTE accredited physical therapy school within three months immediately preceding application for licensure;
- (c) is under the direct, on-site supervision of a physical therapist with an active, non-temporary license if employed as a physical therapist; and
- (d) has registered to take the required licensure examination.

(2) A temporary physical therapist or temporary physical therapist assistant license issued under Subsection (1) expires the earlier of:

- (a) six months from the date of issuance;
- (b) the date upon which the Division receives notice from the examination agency that the individual has failed the examination twice; or
- (c) the date upon which the Division issues the individual full licensure.

(3) A temporary physical therapist or temporary physical therapist assistant license issued in accordance with this section cannot be renewed or extended.

R156-24b-308. Reinstatement of a Physical Therapist or Physical Therapist Assistant License which has Expired Beyond Two Years.

In addition to the requirements established in Section R156-1-308g and in accordance with Subsection 58-1-308(6), an applicant for reinstatement for licensure as a physical therapist or physical therapist assistant, whose license has

been expired for two or more years, shall complete one or more of the following upon request of the Division in collaboration with the Board:

- (1) meet with the Board to evaluate the applicant's ability to safely and competently practice physical therapy;
- (2) pass the NPTE examination of the FSBPT if it is determined that examination or reexamination is necessary to verify the applicant's ability to safely and competently practice; and
- (3) establish and carry out a plan of supervision under an approved supervisor which may include up to 4,000 hours of physical therapy training under a temporary physical therapist or physical therapist assistant license before qualifying for full reinstatement of the license.

R156-24b-502. Unprofessional Conduct.

Unprofessional conduct includes:

- (1) violating, as a physical therapist, any provision of the American Physical Therapy Association's Code of Ethics for the Physical Therapist, last amended July 2010, which is hereby adopted and incorporated by reference;
- (2) violating, as a physical therapist, any provision of the American Physical Therapy Association's Guide for Professional Conduct, last amended November 2010, which is hereby adopted and incorporated by reference;
- (3) not providing supervision, as a physical therapist, as set forth in Section R156-24b-503;
- (4) violating, as a physical therapist assistant, any provision of the American Physical Therapy Association's Standards of Ethical Conduct for the Physical Therapist Assistant, last amended November 2010, which is hereby adopted and incorporated by reference; and
- (5) violating, as a physical therapist assistant, any provision of the American Physical Therapy Association's Guide for Conduct of the Physical Therapist Assistant, last amended July 2010, which is hereby adopted and incorporated by reference.

R156-24b-503. Physical Therapist Supervisory Authority and Responsibility.

In accordance with Section 58-24b-404, a physical therapist's supervision of a physical therapist assistant or a physical therapy aide shall meet the following conditions:

- (1) a full-time equivalent physical therapist can supervise no more than three full-time equivalent supportive personnel unless approved by the board and Division; and
- (2) a physical therapist shall provide treatment to a patient at least every tenth treatment but no longer than 30 days from the day of the physical therapist's last treatment day, whichever is less.

R156-24b-505. Trigger Point Dry Needling - Education and Experience Required - Registration.

(1) A course approved by one of the following organizations meets the standards of Section 58-24b-505 if it includes the hours and treatment sessions specified in Section 58-24b-505:

- (a) Utah Physical Therapy Association (UPTA);
- (b) American Physical Therapy Association (APTA); or
- (c) Federation of State Boards of Physical Therapy (FSBPT).

(2) The level of supervision required during the course established under Section 58-24b-505 is general supervision, as defined in R156-1-102a(4)(c).

(3) General supervision shall be provided by a licensed health care provider who:

- (a) has a scope of practice that includes dry needling; and
- (b) can demonstrate two years of dry needling practice

techniques.

KEY: licensing, physical therapy, physical therapist,
physical therapist assistant

March 24, 2015

58-24b-101

Notice of Continuation November 15, 2011 58-1-106(1)(a)

58-1-202(1)(a)

R162. Commerce, Real Estate.**R162-2c. Utah Residential Mortgage Practices and Licensing Rules.****R162-2c-101. Title.**

This chapter is known as the "Utah Residential Mortgage Practices and Licensing Rules."

R162-2c-102. Definitions.

(1) The acronym "ALM" stands for associate lending manager.

(2) The acronym "BLM" stands for branch lending manager.

(3) "Certification" means authorization from the division to:

(a) establish and operate a school that provides courses for Utah-specific prelicensing education or continuing education; or

(b) function as an instructor for courses approved for Utah-specific prelicensing education or continuing education.

(4) "Credit hour" means 50 minutes of instruction within a 60-minute time period, allowing for a ten-minute break.

(5) "Control person" is defined in Section 61-2c-102(1)(p).

(6) "Expired license" means a license that is not renewed according to applicable deadlines, but is eligible to be reinstated.

(7) "Individual applicant" means any individual who applies to obtain or renew a license to practice as a mortgage loan originator or lending manager.

(8) "Incentive program" means a program through which a licensed entity may, pursuant to Subsection R162-2c-301b, pay a licensed mortgage loan originator who is sponsored by the entity for bringing business into the entity.

(9) "Instruction method" means the forum through which the instructor and student interact and may be:

(a) classroom: traditional instruction where instructors and students are located in the same physical location;

(b) classroom equivalent: an instructor-led course where the instructor and students may be in two or more physical locations; or

(c) online: instructor and student interact through an online classroom.

(10) "Instructor applicant" means any individual who applies to obtain or renew certification as an instructor of Utah-specific pre-licensing or continuing education courses.

(11)(a) "Lending manager" is defined in Section 61-2c-102(1)(aa).

(b) "Lending manager license" includes:

- (i) a principal lending manager license;
- (ii) an associate lending manager license; and
- (iii) a branch lending manager license.

(12) The acronym "LM" stands for lending manager and includes the following licensing designations:

- (a) principal lending manager;
- (b) associate lending manager; and
- (c) branch lending manager.

(13) "Mortgage entity" means any entity that:

- (a) engages in the business of residential mortgage lending;
- (b) is required to be licensed under Section 61-2c-201; and
- (c) operates under a business name or other trade name that is registered with the Division of Corporations and Commercial Code.

(14) "Nationwide database" means the Nationwide Mortgage Licensing System and Registry.

(15) The acronym "NMLS" stands for Nationwide Mortgage Licensing System.

- (16) "Other trade name" means any assumed business

name under which an entity does business.

(17) "Personal information" means a person's first name or first initial and last name, combined with any one or more of the following data elements relating to that person when either the name or data element is unencrypted or not protected by another method that renders the data unreadable or unusable:

- (a) Social Security number;
- (b) financial account number, or credit or debit card number; or
- (c) driver license number or state identification card number.

(18) The acronym "PLM" stands for principal lending manager.

(19) "Qualifying individual" means the LM, managing principal, or qualified person who is identified on the MU1 form in the nationwide database as the person in charge of an entity.

(20) "Reapplication" or "reapply" refers to a request for licensure that is submitted after the deadline for reinstatement expires and the license has become terminated.

(21) "Reinstatement" or "reinstate" refers to a request for a licensure that is submitted after the applicable December 31 license expiration date passes and by or before February 28 of the following calendar year.

(22) As used in Subsection R162-2c-201, "relevant information" includes:

- (a) court dockets;
- (b) charging documents;
- (c) orders;
- (d) consent agreements; and
- (e) any other information the division may require.

(23) "Restricted license" means any license that is issued subject to a definite period of suspension or terms of probation.

(24) "Safeguard" means to prevent unauthorized access, use, disclosure, or dissemination.

(25) "School" means

(a) any college or university accredited by a regional accrediting agency that is recognized by the United States Department of Education;

- (b) any community college;
- (c) any vocational-technical school;
- (d) any state or federal agency or commission;
- (e) any nationally recognized mortgage organization that has been approved by the commission;

(f) any Utah mortgage organization that has been approved by the commission;

(g) any local mortgage organization that has been approved by the commission; or

(h) any proprietary mortgage education school that has been approved by the commission.

(26) "School applicant" means a director or owner of a school who applies to obtain or renew a school's certification.

(27) "Terminated license" means a license that was not renewed or reinstated according to applicable deadlines.

R162-2c-201. Licensing and Registration Procedures.

(1) Mortgage loan originator.

(a) To obtain a Utah license to practice as a mortgage loan originator, an individual who is not currently and validly licensed in any state shall:

(i) evidence good moral character pursuant to R162-2c-202(1);

(ii) evidence competency to transact the business of residential mortgage loans pursuant to R162-2c-202(2);

(iii) evidence financial responsibility pursuant to R162-2c-202(3);

(iv) obtain a unique identifier through the nationwide

database;

(v) successfully complete, within the 12-month period prior to the date of application, 15 hours of Utah-specific pre-licensing education as approved by the division;

(vi)(A) successfully complete 20 hours of pre-licensing education as approved by the nationwide database according to the nationwide database outline for national course curriculum; or

(B) if the individual previously passed the 20-hour national course, obtained a license, and thereafter allowed the license to expire, successfully complete continuing education:

(I) approved by the nationwide database; and

(II) in the number of hours that would have been required to renew the expired license in the year in which the individual allowed the license to expire;

(vii) take and pass the examinations that meet the requirements of Section 61-2c-204.1(4) and that:

(A) are approved and administered through the nationwide database; and

(B) consist of a national component and a Utah-specific state component;

(viii) request licensure as a mortgage loan originator through the nationwide database;

(ix) authorize a criminal background check and submit fingerprints through the nationwide database;

(x) authorize the nationwide database to provide the individual's credit report to the division for review;

(xi) provide to the division all relevant information regarding "yes" answers to disclosure questions found within the application submitted on the MU4 form;

(xii) record with the nationwide database a mailing address, if the applicant is not able to accept mail at the physical location or street address that is required to be on record with the nationwide database pursuant to Section 61-2c-106(1)(a);

(xiii) complete, sign, and submit to the division a social security verification form as provided by the division; and

(xiv) pay all fees through the nationwide database as required by the division and by the nationwide database.

(b) To obtain a Utah license to practice as a mortgage loan originator, an individual who is currently and validly licensed in another state shall:

(i) evidence good moral character pursuant to R162-2c-202(1);

(ii) evidence competency to transact the business of residential mortgage loans pursuant to R162-2c-202(2);

(iii) evidence financial responsibility pursuant to R162-2c-202(3);

(iv)(A) successfully complete, within the 12-month period prior to the date of application, 15 hours of Utah-specific mortgage loan originator prelicensing education; and

(B) take and pass the Utah-specific state examination component;

(v) provide to the division all relevant information regarding "yes" answers to disclosure questions found within the application submitted on the MU4 form;

(vi) record with the nationwide database a mailing address, if the applicant is not able to accept mail at the physical location or street address that is required to be on record with the nationwide database pursuant to Section 61-2c-106(1)(a);

(vii) request licensure as a mortgage loan originator through the nationwide database;

(viii) authorize a criminal background check through the nationwide database;

(ix) authorize the nationwide database to provide the individual's credit report to the division for review;

(x) complete, sign, and submit to the division a social security verification form as provided by the division; and

(xi) pay all fees through the nationwide database as required by the division and by the nationwide database.

(2) Lending manager. To obtain a Utah license to practice as an LM, an individual shall:

(a) evidence good moral character pursuant to R162-2c-202(1);

(b) evidence competency to transact the business of residential mortgage loans pursuant to R162-2c-202(2);

(c) evidence financial responsibility pursuant to R162-2c-202(3);

(d) provide to the division:

(i) the individual's unique identifier as assigned through the nationwide database; and

(ii) evidence that the individual has taken and passed:

(A) the 20-hour national mortgage loan originator prelicensing course; and

(B) the mortgage loan originator examinations that:

(I) meet the requirements of Section 61-2c-204.1(4);

(II) are approved and administered through the nationwide database; and

(III) consist of a national component and a Utah-specific state component;

(e) obtain approval from the division to take the Utah-specific LM prelicensing education by evidencing that the applicant has satisfied, during the five-year period preceding the date of application, the experience requirement of Section 61-2c-206(1)(d) through:

(i)(A) three years full-time experience originating first-lien residential mortgages pursuant to Section 61-2c-102(1)(ee)(i)(A);

(I) under a license issued by a state regulatory agency; or

(II) as an employee of a depository institution; and

(B) evidence of having originated a minimum of 45 first-lien residential mortgages;

(ii)(A)(I) two years full-time experience as described in this Subsection (2)(e)(i)(A); and

(II) additional full-time experience per the equivalency calculation in Subsection R162-2c-501a; and

(B)(I) evidence of having originated a minimum of 30 first-lien residential mortgages; and

(II) up to 15 additional points according to the experience points schedule in Subsection R162-2c-501b; or

(iii)(A) ten years of full-time experience providing direct supervision as a loan manager in the residential mortgage industry within the past 12 years;

(B) evidence of having directly supervised during the ten years described in this Subsection (2)(e)(iii)(A) no less than five licensed or registered loan originators;

(C) Although the five individuals licensed or registered as described in this Subsection (2)(e)(iii)(B) may have changed over time, the number of individuals being managed or supervised must have remained at a minimum of five individuals at all times during the ten years described in this Subsection (2)(e)(iii)(A); and

(D) evidence of having personally originated a minimum of 15 first-lien residential mortgages within the past five years.

(f) within the 12-month period preceding the date of application, successfully complete 40 hours of Utah-specific LM prelicensing education as certified by the division;

(g) take and pass a lending manager examination as approved by the commission;

(h) provide to the division all relevant information regarding "yes" answers to disclosure questions found within the application submitted on the MU4 form;

(i) record with the nationwide database a mailing address, if the applicant is not able to accept mail at the physical location or street address that is required to be on

record with the nationwide database pursuant to Section 61-2c-106(1)(a);

(j)(i) register in the nationwide database by selecting the "lending manager" license type and completing the associated MU4 form; and

(ii) designate in the nationwide database whether the individual will be acting for the sponsoring entity as:

- (A) the principal lending manager;
- (B) an associate lending manager; or
- (C) a branch lending manager;

(k) authorize a criminal background check and submit fingerprints through the nationwide database;

(l) authorize the nationwide database to provide the individual's credit report to the division for review;

(m) complete, sign, and submit to the division a social security verification form as provided by the division; and

(n) pay all fees through the nationwide database as required by the division and by the nationwide database.

(o) Notwithstanding the requirement in this Subsection 201(2)(e) that an applicant for licensure as a lending manager provide evidence of the required experience prior to obtaining approval from the division to take the Utah-specific lending manager preclicensing education, an applicant may request approval from the division for approval to take the preclicensing education upon applicant's written affirmation that:

(i) applicant's current employment status could be affected by documenting applicant's experience;

(ii) applicant requests approval to proceed with the Utah-specific preclicensing education despite not having documented the necessary experience; and

(iii) applicant understands that if division approval is granted, applicant assumes the risk of the time and expense of the preclicensing education, testing, and application fee with no assurance that applicant's experience will qualify applicant for licensure as a lending manager.

(3) Mortgage entity.

(a) To obtain a Utah license to operate as a mortgage entity, a person shall:

(i) establish that all control persons meet the requirements for moral character pursuant to R162-2c-202(1);

(ii) establish that all control persons meet the requirements for competency pursuant to R162-2c-202(2);

(iii) register any other trade name with the Division of Corporations and Commercial Code;

(iv) register the entity in the nationwide database by:

(A) submitting an MU1 form that includes:

(I) all required identifying information;

(II) the name of the PLM who, pursuant to Subsection R162-2c-301a(3)(a)(iv), will serve as the entity's qualifying individual;

(III) the name of any LM who, pursuant to Subsection R162-2c-301a(3)(a)(iv), will serve as a branch lending manager;

(IV) the name of any individuals who may serve as control persons;

(V) the entity's registered agent; and

(VI) any other trade name under which the entity will operate; and

(B) creating a sponsorship through the nationwide database that identifies the mortgage loan originator(s) sponsored by the entity;

(v) register any branch office operating from a different location than the entity;

(vi) pay all fees through the nationwide database as required by the division and by the nationwide database;

(vii) provide to the division proof that any assumed business name or other trade name is registered with the Division of Corporations and Commercial Code;

(viii) provide to the division all court documents related to any criminal proceeding not disclosed through a previous application or renewal and involving any control person;

(ix) provide to the division complete documentation of any action taken by a regulatory agency against:

(A) the entity itself; or

(B) any control person; and

(C) not disclosed through a previous application or renewal; and

(x) provide to the division a notarized letter on company letterhead, signed by the owner or president of the entity, authorizing the PLM to use the entity's name.

(b) Restrictions on entity name. No license may be issued by the division to an entity that proposes to operate under a name that closely resembles the name of another entity licensee, or that the division determines might otherwise be confusing or misleading to the public.

(4) Branch office.

(a) To register a branch office with the division, a person shall:

(i) obtain a Utah entity license for the entity under which the branch office will be registered;

(ii) submit to the nationwide database an MU3 form that includes:

(A) all required identifying information; and

(B) the name of the LM who will serve as the branch lending manager;

(iii) create a sponsorship through the nationwide database that identifies the mortgage loan originator(s) who will work from the branch office; and

(iv) pay all fees through the nationwide database as required by the division and by the nationwide database.

(b) A person who registers another trade name and operates under that trade name from an address that is different from the address of the entity shall register the other trade name as a branch office pursuant to this Subsection (4).

(c)(i) A PLM may not simultaneously serve as a BLM if Subsection R162-2c-301a(3)(a)(iv)(B) applies.

(ii) An individual may not serve as the BLM for more than one branch at any given time.

(5) Licenses not transferable.

(a) A licensee shall not transfer the licensee's license to any other person.

(b) A licensee shall not allow any other person to work under the licensee's license.

(c) If a change in corporate structure of a licensed entity creates a separate and unique legal entity, that entity shall obtain a unique license, and shall not operate under any existing license.

(6) Expiration of test results.

(a) Scores for the mortgage loan originator licensing examination shall be valid for five years.

(b) Scores for the LM exam shall be valid for 90 days.

(7) Incomplete LM application.

(a) The division may grant a 30-day extension of the 90-day application window upon a finding that:

(i) an applicant has made a good faith attempt to submit a completed application; but

(ii) requires more time to provide missing documents or to obtain additional information.

(b) If the applicant does not supply the required documents or information within the 30-day extension, the division may deny the application as incomplete.

(8) Nonrefundable fees. All fees are nonrefundable, regardless of whether an application is granted or denied.

(9) Other trade names.

(a) The division shall not approve a license for any person operating under an assumed business name that poses a reasonable likelihood of misleading the public into thinking

that the person is:

- (i) endorsed by the division, the state government, or the federal government;
- (ii) an agency of the state or federal government; or
- (iii) not engaged in the business of residential mortgage loans.

(b) A mortgage entity that operates under another trade name shall register the other trade name by including it on the MU1 form and obtaining the required registration.

R162-2c-202. Qualifications for Licensure.

(1) Character. Individual applicants and control persons shall evidence good moral character, honesty, integrity, and truthfulness.

(a) An applicant may not have:

- (i) been convicted of, pled guilty to, pled no contest to, pled guilty in a similar manner to, or resolved by diversion or its equivalent:

(A) a felony involving an act of fraud, dishonesty, a breach of trust, or money laundering;

(B) any felony in the seven years preceding the day on which an application is submitted to the division;

(C) in the five years preceding the day on which an application is submitted to the division:

(I) a misdemeanor involving moral turpitude; or

(II) a crime in another jurisdiction that is the equivalent of a misdemeanor involving moral turpitude;

(D) in the three years preceding the day on which an application is submitted to the division, any misdemeanor involving a finding of:

(I) fraud;

(II) misrepresentation;

(III) theft; or

(IV) dishonesty;

(ii) had a license as a mortgage loan originator revoked by a government regulatory body at any time, unless the revocation is subsequently vacated or converted;

(iii) had a professional license or registration, whether issued by a Utah regulatory body or by another jurisdiction, suspended, surrendered, canceled, or denied in the five years preceding the date the individual applies for licensure if the suspension, surrender, cancellation, or denial is based on misconduct in a professional capacity that relates to:

(A) moral character;

(B) honesty;

(C) integrity;

(D) truthfulness; or

(E) the competency to transact the business of residential mortgage loans;

(iv) in the five years preceding the day on which an application is submitted to the division, been the subject of a bar by the:

(A) Securities and Exchange Commission;

(B) New York Stock Exchange; or

(C) Financial Industry Regulatory Authority;

(v) had a permanent injunction entered against the individual:

(A) by a court or administrative agency; and

(B) on the basis of:

(I) conduct or a practice involving the business of residential mortgage loans; or

(II) conduct involving fraud, misrepresentation, or deceit.

(b) An applicant may be denied a license or issued a restricted license for incidents in the applicant's past other than those specified in this Subsection (1)(a) that reflect negatively on the applicant's moral character, honesty, integrity, and truthfulness. In evaluating an applicant for these qualities, the division and commission may consider any

evidence, including the following:

(i) criminal convictions or plea agreements, with particular consideration given to convictions or plea agreements relative to charges that involve moral turpitude;

(ii) the circumstances that led to any criminal conviction or plea agreement under consideration;

(iii) past acts related to honesty or moral character, with particular consideration given to any such acts involving the business of residential mortgage loans;

(iv) dishonest conduct that would be grounds under Utah law for sanctioning an existing licensee;

(v) civil judgments in lawsuits brought on grounds of fraud, misrepresentation, or deceit;

(vi) court findings of fraudulent or deceitful activity;

(vii) evidence of non-compliance with court orders or conditions of sentencing;

(viii) evidence of non-compliance with:

(A) terms of a diversion agreement still subject to prosecution;

(B) a probation agreement; or

(C) a plea in abeyance; or

(ix) failure to pay taxes or child support obligations.

(2) Competency. Individual applicants and control persons shall evidence competency to transact the business of residential mortgage loans. In evaluating an applicant for competency, the division and commission may consider any evidence that reflects negatively on an applicant's competency, including:

(a) civil judgments, with particular consideration given to any such judgments involving the business of residential mortgage loans;

(b) failure to satisfy a civil judgment that has not been discharged in bankruptcy;

(c) failure of any previous mortgage loan business in which the individual was engaged, as well as the circumstances surrounding that failure;

(d) evidence as to the applicant's business management and employment practices, including the payment of employees, independent contractors, and third parties;

(e) the extent and quality of the applicant's training and education in mortgage lending;

(f) the extent and quality of the applicant's training and education in business management;

(g) the extent of the applicant's knowledge of the Utah Residential Mortgage Practices Act;

(h) evidence of disregard for licensing laws;

(i) evidence of drug or alcohol dependency;

(j) sanctions placed on professional licenses; and

(k) investigations conducted by regulatory agencies relative to professional licenses.

(3) Financial responsibility. Individual applicants shall evidence financial responsibility. To evaluate an applicant for financial responsibility, the division shall:

(a) access the credit information available through the NMLS of:

(i) an applicant for initial licensure, beginning October 18, 2010; and

(ii) a licensee who requests renewal during the 2010 renewal period, unless the licensee's credit report was reviewed in issuing the initial license; and

(b) give particular consideration to:

(i) outstanding civil judgments;

(ii) outstanding tax liens;

(iii) foreclosures;

(iv) multiple social security numbers attached to the individual's name;

(v) child support arrearages; and

(vi) bankruptcies.

(4) Age. An applicant shall be at least 18 years of age.

(5) Minimum education. An applicant shall have a high school diploma, GED, or equivalent education as approved by the commission.

R162-2c-203. Utah-Specific Education Certification.

- (1) School certification.
 - (a) A school offering Utah-specific education shall certify with the division before providing any instruction.
 - (b) To certify, a school applicant shall prepare and supply the following information to the division:
 - (i) contact information, including:
 - (A) name, phone number, email address, and address of the physical facility;
 - (B) name, phone number, email address, and address of any school director;
 - (C) name, phone number, email address, and address of any school owner; and
 - (D) an e-mail address where correspondence will be received by the school;
 - (ii) evidence that all school directors and owners meet the moral character requirements outlined in R162-2c-202(1) and the competency requirements outlined in R162-2c-202(2);
 - (iii) school description, including:
 - (A) type of school;
 - (B) description of the school's physical facilities; and
 - (C) type of instruction method;
 - (iv) list of the instructor(s), including any guest lecturer(s), who will be teaching each course;
 - (v) proof that each instructor:
 - (A) has been certified by the division; or
 - (B) is exempt from certification under Subsection 203(5)(f);
 - (vi) statement of attendance requirements as provided to students;
 - (vii) refund policy as provided to students;
 - (viii) disclaimer as provided to students; and
 - (ix) criminal history disclosure statement as provided to students.
 - (c) Minimum standards.
 - (i) The course schedule may not provide or allow for more than eight credit hours per student per day.
 - (ii) The attendance statement shall require that each student attend at least 90% of the scheduled class time.
 - (iii) The disclaimer shall adhere to the following requirements:
 - (A) be typed in all capital letters at least 1/4 inch high; and
 - (B) state the following language: "Any student attending (school name) is under no obligation to affiliate with any of the mortgage entities that may be soliciting for licensees at this school."
 - (iv) The criminal history disclosure statement shall:
 - (A) be provided to students while they are still eligible for a full refund; and
 - (B) clearly inform the student that upon application with the nationwide database, the student will be required to:
 - (I) accurately disclose the student's criminal history according to the licensing questionnaire provided by the nationwide database and authorized by the division; and
 - (II) provide to the division complete court documentation relative to any criminal proceeding that the applicant is required to disclose;
 - (C) clearly inform the student that the division will consider the applicant's criminal history pursuant to R162-2c-202(1) in making a decision on the application; and
 - (D) include a section for the student's attestation that the student has read and understood the disclosure.
 - (d) Within ten days after the occurrence of any material

change in the information outlined in Subsection (1), the school shall provide to the division written notice of that change.

(2) School certification expiration and renewal. A school certification expires 24 months from the date of issuance and must be renewed before the expiration date in order for the school to remain in operation. To renew, a school applicant shall:

- (a) complete a renewal application as provided by the division;
- (b) pay a nonrefundable renewal fee;
- (c) provide a list of all proposed courses with a projected schedule of days, times, and locations of classes; and
- (d) provide the information specified in Subsection 3(c) for Utah-specific course certification for the division's evaluation of each proposed course.
- (3) Utah-specific course certification.
 - (a) A school providing a Utah-specific course shall certify the course with the division before offering the course to students.
 - (b) Application shall be made at least 30 days prior to the date on which a course requiring certification is proposed to begin.
 - (c) To certify a course, a school applicant shall prepare and supply the following information:
 - (i) instruction method;
 - (ii) outline of the course, including:
 - (A) a list of subjects covered in the course;
 - (B) reference to the approved course outline for each subject covered;
 - (C) length of the course in terms of hours spent in classroom instruction;
 - (D) number of course hours allocated for each subject;
 - (E) at least three learning objectives for every hour of classroom time;
 - (F) instruction format for each subject; i.e. lecture or media presentation;
 - (G) name and credentials of any guest lecturer; and
 - (H) list of topic(s) and session(s) taught by any guest lecturer;
 - (iii) a list of the titles, authors, and publishers of all required textbooks;
 - (iv) copies of any workbook used in conjunction with a non-lecture method of instruction;
 - (v) a copy of each quiz and examination, with an answer key; and
 - (vi) the grading system, including methods of testing and standards of grading.
 - (d) Minimum standards.
 - (i) All texts, workbooks, supplement pamphlets and other materials shall be appropriate, current, accurate, and applicable to the required course outline.
 - (ii) The course shall cover all of the topics set forth in the associated outline.
 - (iii) The lecture method shall be used for at least 50% of course instruction unless the division gives special approval otherwise.
 - (iv) A school applicant that uses a non-lecture method for any portion of course instruction shall provide to the student:
 - (A) an accompanying workbook as approved by the division for the student to complete during the instruction; and
 - (B) a certified instructor available within 48 hours of the non-lecture instruction to answer student questions.
 - (v) The division shall not approve an online education course unless:
 - (A) there is a method to ensure that the enrolled student

is the person who actually completes the course;

(B) the time spent in actual instruction is equivalent to the credit hours awarded for the course; and

(C) there is a method to ensure that the student comprehends the material.

(4) Course expiration and renewal.

(a) A preclicensing course expires at the same time the school certification expires.

(b) A preclicensing course certification is renewed automatically when the school certification is renewed.

(5) Education committee.

(a) The commission may appoint an education committee to:

(i) assist the division and the commission in approving course topics; and

(ii) make recommendations to the division and the commission about:

(A) whether a particular course topic is relevant to residential mortgage principles and practices; and

(B) whether a particular course topic would tend to enhance the competency and professionalism of licensees.

(b) The division and the commission may accept or reject the education committee's recommendation on any course topic.

(6) Instructor certification.

(a) Except as provided in this Subsection (6)(f), an instructor shall certify with the division before teaching a Utah-specific course.

(b) Application shall be made at least 30 days prior to the date on which the instructor proposes to begin teaching.

(c) To certify as an instructor of mortgage loan originator preclicensing courses, an individual shall provide evidence of:

(i) a high school diploma or its equivalent;

(ii)(A) at least five years of experience in the residential mortgage industry within the past ten years; or

(B) successful completion of appropriate college-level courses specific to the topic proposed to be taught;

(iii)(A) a minimum of twelve months of full-time teaching experience;

(B) part-time teaching experience that equates to twelve months of full-time teaching experience; or

(C) participation in instructor development workshops totaling at least two days in length; and

(iv) having passed, within the six-month period preceding the date of application, the lending manager licensing examination.

(d) To certify as an instructor of LM preclicensing courses, an individual shall:

(i) meet the general requirements of this Subsection 6(c); and

(ii) meet the specific requirements for any of the following courses the individual proposes to teach.

(A) Management of a Residential Mortgage Loan Office: at least two years practical experience in managing an office engaged in the business of residential mortgage loans.

(B) Mortgage Lending Law: two years practical experience in the field of real estate law; and either:

(I) current active membership in the Utah Bar Association; or

(II) degree from an American Bar Association accredited law school.

(C) Advanced Appraisal:

(I) at least two years practical experience in appraising; and

(II) current state-certified appraiser license.

(D) Advanced Finance:

(I) at least two years practical experience in real estate finance; and

(II) association with a lending institution as a loan originator.

(e) To act as an instructor of continuing education courses, an individual shall certify through the nationwide database.

(f) The following instructors are not required to be certified by the division:

(i) a guest lecturer who:

(A) is an expert in the field on which instruction is given;

(B) provides to the division a resume or similar documentation evidencing satisfactory knowledge, background, qualifications, and expertise; and

(C) teaches no more than 20% of the course hours;

(ii) a college or university faculty member who evidences academic training, industry experience, or other qualifications acceptable to the division;

(iii) an individual who:

(A) evidences academic training, industry experience, or other qualifications satisfactory to the division; and

(B) receives approval from the commission; and

(iv) a division employee.

(g) Renewal.

(i) An instructor certification for Utah-specific preclicensing education expires 24 months from the date of issuance and shall be renewed before the expiration date.

(ii) To renew an instructor certification for Utah-specific preclicensing education, an applicant shall submit to the division:

(A) evidence of having taught at least 20 hours of classroom instruction in a certified mortgage education course during the preceding two years;

(B) evidence of having attended an instructor development workshop sponsored by the division during the preceding two years; and

(C) a renewal fee as required by the division.

(iii) To renew an instructor certification for continuing education, an individual shall certify through the nationwide database.

(h) Reinstatement.

(i) An instructor who is certified by the division may reinstate an expired certification within 30 days of expiration by:

(A) complying with this Subsection (6)(g); and

(B) paying an additional non-refundable late fee.

(ii) Until six months following the date of expiration, an instructor who is certified by the division may reinstate a certification that has been expired more than 30 days by:

(A) complying with this Subsection (6)(g);

(B) paying an additional non-refundable late fee; and

(C) completing six classroom hours of education related to residential mortgages or teaching techniques.

(7)(a) The division may monitor schools and instructors for:

(i) adherence to course content;

(ii) quality of instruction and instructional materials; and

(iii) fulfillment of affirmative duties as outlined in R162-2c-301a(5)(a) and R162-2c-301a(6)(a).

(b) To monitor schools and instructors, the division may:

(i) collect and review evaluation forms; or

(ii) assign an evaluator to attend a course and make a report to the division.

R162-2c-204. License Renewal, Reinstatement, and Reapplication.

(1) Deadlines.

(a) License renewal.

(i) To renew on time, a person who holds an active license as of October 31 shall renew by December 31 of the same calendar year.

(ii)(A) A person who obtains a license on or after November 1 shall renew by December 31 of the following calendar year.

(B) A person who is not required to renew in the first year of licensure pursuant to this Subsection (1)(a)(ii)(A) shall nevertheless complete, prior to December 31 of the first year of licensure, continuing education as required for renewal pursuant to Subsection R162-2c-204(3)(a) if the individual did not complete the mortgage loan originator national pre-licensing education during the calendar year.

(b) Reinstatement. The deadline to reinstate a license that expires on December 31 is February 28 of the year following the date of expiration.

(c) After the reinstatement deadline passes, a person shall reapply for licensure pursuant to Subsection R162-2c-204(3)(c).

(2) Qualification for renewal.

(a) Character.

(i) Individuals applying to renew or reinstate a license shall evidence that they maintain good moral character, honesty, integrity, and truthfulness as required for initial licensure.

(ii)(A) An individual applying for a renewed license may not have:

(I) a felony that resulted in a conviction or plea agreement during the renewal period; or

(II) a finding of fraud, misrepresentation, or deceit entered against the applicant by a court of competent jurisdiction or a government agency and occurring within the renewal period.

(B) A licensee shall submit a fingerprint background report in order to renew a license:

(A) in the renewal period beginning November 1, 2015; and

(B) every fifth year following the renewal period beginning November 1, 2015.

(iii) The division may deny an individual applicant a renewed license upon evidence, as outlined in Subsection R162-2c-202(1)(b), of circumstances that reflect negatively on the applicant's character, honesty, integrity, or truthfulness and that:

(A) occurred during the renewal period; or

(B) were not disclosed and considered in a previous application or renewal.

(iv) The division may deny an entity applicant a renewed license upon evidence that a control person fails to meet the standards for character, honesty, integrity, and truthfulness required of individual applicants.

(c) Financial responsibility. A licensee shall submit a credit report in order to renew a license:

(i) in the renewal period beginning November 1, 2015; and

(ii) every fifth year following the renewal period beginning November 1, 2015.

(b) Competency.

(i) Individual applicants and control persons shall evidence that they maintain the competency required for initial licensure.

(ii) The division may deny an individual applicant a renewed license upon evidence, as outlined in Subsection R162-2c-202(2), of circumstances that reflect negatively on the applicant's competency and that:

(A) occurred during the renewal period; or

(B) were not disclosed and considered in a previous application or renewal.

(iii) The division may deny an entity applicant a

renewed license upon evidence that a control person fails to meet the standard for competency required of individual applicants.

(3) Education requirements for renewal, reinstatement, and reapplication.

(a) License renewal.

(i) Except as provided in this Subsection (3)(a)(ii), an individual who holds an active license as of January 1 of the calendar year shall complete, within the calendar year in which the individual's license is scheduled to expire, the following courses, none of which may be duplicative of courses taken in the same or preceding renewal period:

(A) beginning with the 2014 renewal, a division-approved course on Utah law, completed annually; and

(B) eight hours of continuing education approved through the nationwide database, as follows:

(I) three hours federal laws and regulations;

(II) two hours ethics (fraud, consumer protection, fair lending issues);

(III) two hours training related to lending standards for non-traditional mortgage products; and

(IV) one hour undefined instruction on mortgage origination.

(ii) An individual who completes the mortgage loan originator national pre-licensing education between January 1 and December 31 of the calendar year is exempt from continuing education, including the division-approved course on Utah law specified in Subsection (3)(a)(i)(A), for the renewal period ending December 31 of the same calendar year.

(b) Reinstatement. To reinstate an expired mortgage loan originator or lending manager license, an individual shall, by February 28 of the calendar year following the date on which the license expired, complete:

(i) the division-approved course on Utah law specified in Subsection (3)(a)(i)(A); and

(ii) eight hours of continuing education:

(A) in topics listed in this Subsection (3)(a)(i)(B); and

(B)(I) approved by the nationwide database as "continuing education" if completed prior to the date of expiration; or

(II) approved by the nationwide database as "late continuing education" if completed between the date of expiration and the deadline for reinstatement.

(c) Reapplication.

(i) To reapply for licensure after the reinstatement deadline passes and by or before December 31 of the calendar year following the date on which the license expired, an individual shall complete the division-approved course on Utah law and continuing education requirement outlined in this Subsection (3)(b).

(ii) To reapply for licensure after the deadline described in this Subsection (3)(c)(i) passes, an individual shall:

(A) complete eight hours of continuing education:

(I) in topics listed in this Subsection (3)(a)(i); and

(II) approved by the nationwide database as "late continuing education"; and

(B) within the 12-month period preceding the date of reapplication, take and pass:

(I) the 15-hour Utah-specific mortgage loan originator pre-licensing education, if the terminated license was a mortgage loan originator license; or

(II) the 40-hour Utah-specific lending manager pre-licensing education and associated examination, if the terminated license was a lending manager license; and

(C) complete the division-approved course on Utah law specified in Subsection (3)(a)(i)(A).

(4) Renewal, reinstatement, and reapplication procedures.

- (a) An individual licensee shall:
 - (i) evidence having completed education as required by Subsection R162-2c-204(3);
 - (ii) submit to the division the jurisdiction-specific documents and information required by the nationwide database; and
 - (iii) submit through the nationwide database:
 - (A) a request for renewal, if renewing or reinstating a license; or
 - (B) a request for a new license, if reapplying; and
 - (iv) pay all fees as required by the division and by the nationwide database, including all applicable late fees.
- (b) An entity licensee shall:
 - (i) submit through the nationwide database a request for renewal;
 - (ii) submit to the division the jurisdiction-specific documents and information required by the nationwide database;
 - (iii) renew the registration of any branch office or other trade name registered under the entity license; and
 - (iv) pay through the nationwide database all fees, including all applicable late fees, required by the division and by the nationwide database.

R162-2c-205. Notification of Changes.

- (1) An individual licensee who is registered with the nationwide database shall:
 - (a) enter into the national database any change in the following:
 - (i) name of licensee;
 - (ii) contact information for licensee, including:
 - (A) mailing address;
 - (B) telephone number(s); and
 - (C) e-mail address(es);
 - (iii) sponsoring entity; and
 - (iv) license status (sponsored or non-sponsored); and
 - (b) pay all change fees charged by the national database and the division.
- (2) An entity licensee shall:
 - (a) enter into the national database any change in the following:
 - (i) name of licensee;
 - (ii) contact information for licensee, including:
 - (A) mailing address;
 - (B) telephone number(s);
 - (C) fax number(s); and
 - (D) e-mail address(es);
 - (iii) sponsorship information;
 - (iv) control person(s);
 - (v) qualifying individual;
 - (vi) license status (sponsored or non-sponsored); and
 - (vii) branch offices or other trade names registered under the entity license; and
 - (b) pay any change fees charged by the national database and the division.

R162-2c-209. Sponsorship.

- (1) A mortgage loan originator who is sponsored by an entity may operate and advertise under the name of:
 - (a) the entity;
 - (b) a branch office registered under the license of the entity; or
 - (c) another trade name registered under the license of the entity.
- (2) A mortgage loan originator who operates or advertises under a name other than that of the entity by which the mortgage loan originator is sponsored:
 - (a) shall exercise due diligence to verify that the name being used is properly registered under the entity license; and

(b) shall not be immune from discipline if the individual conducts the business of residential mortgage loans on behalf of more than one entity, in violation of Section 61-2c-209(4)(b)(iii).

(3) An individual who holds a license as a mortgage loan originator may perform loan processing activities regardless of whether:

- (a) the individual's license is sponsored by a licensed entity at the time the loan processing activities are performed; or
- (b) the individual is employed by a licensed entity.

R162-2c-301a. Unprofessional Conduct.

- (1) Mortgage loan originator.
 - (a) Affirmative duties. A mortgage loan originator who fails to fulfill any affirmative duty shall be subject to discipline under Sections 61-2c-401 through 405. A mortgage loan originator shall:
 - (i) solicit business and market products solely in the name of the mortgage loan originator's sponsoring entity;
 - (ii) conduct the business of residential mortgage loans solely in the name of the mortgage loan originator's sponsoring entity;
 - (iii) remit to any third party service provider the fee(s) that have been collected from a borrower on behalf of the third party service provider, including:
 - (A) appraisal fees;
 - (B) inspection fees;
 - (C) credit reporting fees; and
 - (D) insurance premiums;
 - (iv) turn all records over to the sponsoring entity for proper retention and disposal; and
 - (v) comply with a division request for information within 10 business days of the date of the request.
 - (b) Prohibited conduct. A mortgage loan originator who engages in any prohibited activity shall be subject to discipline under Sections 61-2c-401 through 405. A mortgage loan originator may not:
 - (i) charge for services not actually performed;
 - (ii) require a borrower to pay more for third party services than the actual cost of those services;
 - (iii) withhold, without reasonable justification, payment owed to a third party service provider in connection with the business of residential mortgage loans;
 - (iv) alter an appraisal of real property; or
 - (v) unless acting under a valid real estate license and not under a mortgage license, perform any act that requires a real estate license under Title 61, Chapter 2f, including:
 - (A) providing a buyer or seller of real estate with a comparative market analysis;
 - (B) assisting a buyer or seller to determine the offering price or sales price of real estate;
 - (C) representing or assisting a buyer or seller of real estate in negotiations concerning a possible sale of real estate;
 - (D) advertising the sale of real estate by use of any advertising medium;
 - (E) preparing, on behalf of a buyer or seller, a Real Estate Purchase Contract, addendum, or other contract for the sale of real property; or
 - (F) altering, on behalf of a buyer or seller, a Real Estate Purchase Contract, addendum, or other contract for the sale of real property.
- (c) A mortgage loan originator does not engage in an activity requiring a real estate license where the mortgage loan originator:
 - (i) offers advice about the consequences that the terms of a purchase agreement might have on the terms and availability of various mortgage products;
 - (ii) owns real property that the mortgage loan originator

offers "for sale by owner"; or

(iii) advertises mortgage loan services in cooperation with a "for sale by owner" seller where the advertising clearly identifies:

- (A) the owner's contact information;
- (B) the owner's role;
- (C) the mortgage loan originator's contact information;

and

(D) the specific mortgage-related services that the mortgage loan originator may provide to a buyer; or

(iv) advertises in conjunction with a real estate brokerage where the advertising clearly identifies the:

- (A) contact information for the brokerage;
- (B) role of the brokerage;
- (C) mortgage loan originator's contact information; and
- (D) specific mortgage-related services that the mortgage loan originator may provide to a buyer.

(2) Lending manager.

(a) Affirmative duties. A lending manager who fails to fulfill any affirmative duty shall be subject to discipline under Sections 61-2c-401 through 405.

(b) An LM who is designated in the nationwide database as the principal lending manager of an entity shall:

(i) be accountable for the affirmative duties outlined in Subsection (1)(a);

(ii) provide to all sponsored mortgage loan originators and unlicensed staff specific written policies as to their affirmative duties and prohibited activities, as established by:

- (A) federal law governing residential mortgage lending;
- (B) state law governing residential mortgage lending

and including the Utah Residential Mortgage Practices Act; and

(C) administrative rules promulgated by the division under authority of the Utah Residential Mortgage Practices Act;

(iii) exercise reasonable supervision over all sponsored mortgage loan originators and over all unlicensed staff by:

(A) directing the details and means of their work activities;

(B) requiring that they read and agree to comply with the Utah Residential Mortgage Practices Act and the rules promulgated thereunder;

(C) requiring that they conduct all residential mortgage loan business in the name of the sponsoring entity; and

(D) prohibiting unlicensed staff from engaging in any activity that requires licensure;

(iv) establish and enforce written policies and procedures for ensuring the independent judgment of any underwriter employed by the PLM's sponsoring entity;

(v) establish and follow procedures for responding to all consumer complaints;

(vi) personally review any complaint relating to conduct by a sponsored mortgage loan originator or unlicensed staff member that might constitute a violation of federal law, state law, or division administrative rules;

(vii) establish and maintain a quality control plan that:

- (A) complies with HUD/FHA requirements;
- (B) complies with Freddie Mac and Fannie Mae requirements; or

(C) includes, at a minimum, procedures for:

(I) performing pre-closing and post-closing audits of at least ten percent of all loan files; and

(II) taking corrective action for problems identified through the audit process; and

(viii) review for compliance with applicable federal and state laws all advertising and marketing materials and methods used by:

- (A) the PLM's sponsoring entity; and
- (B) the entity's sponsored mortgage loan originators;

and

(ix)(A) actively supervise:

(I) any ALM sponsored by the entity; and

(II) any BLM who is assigned to oversee the mortgage loan origination activities of a branch office; and

(B) remain personally responsible and accountable for adequate supervision of all sponsored mortgage loan originators, unlicensed staff, and entity operations throughout all locations.

(c) An LM who is designated as a branch lending manager in the nationwide database shall:

(i) work from the branch office the LM is assigned to manage;

(ii) personally oversee all mortgage loan origination activities conducted through the branch office; and

(iii) personally supervise all mortgage loan originators and unlicensed staff affiliated with the branch office.

(d) Prohibited conduct. An LM who engages in any prohibited activity shall be subject to discipline under Sections 61-2c-401 through 405. An LM may not engage in any activity that is prohibited for a mortgage loan originator or a mortgage entity.

(3) Mortgage entity.

(a) Affirmative duties. A mortgage entity that fails to fulfill any affirmative duty shall be subject to discipline under Sections 61-2c-401 through 405. A mortgage entity shall:

(i) remit to any third party service provider the fee(s) that have been collected from a borrower on behalf of the third party service provider, including:

- (A) appraisal fees;
- (B) inspection fees;
- (C) credit reporting fees; and
- (D) insurance premiums;

(ii) retain and dispose of records according to R162-2c-302; and

(iii) comply with a division request for information within 10 business days of the date of the request;

(iv)(A) notify the division of the location from which the entity's PLM will work; and

(B) if the entity originates Utah loans from a location where the PLM is not present to oversee and supervise activities related to the business of residential mortgage loans, assign a separate LM to serve as the BLM per Section 61-2c-102(1)(e); and

(v) if using an incentive program, strictly comply with Subsection R162-2c-301b.

(b) Prohibited conduct. A mortgage entity shall be subject to discipline under Sections 61-2c-401 through 405 if:

(i) any sponsored mortgage loan originator or LM engages in any prohibited conduct; or

(ii) any unlicensed employee performs an activity for which licensure is required.

(4) Reporting unprofessional conduct.

(a) The division shall report in the nationwide database any final disciplinary action taken against a licensee for unprofessional conduct.

(b) A licensee may challenge the information entered by the division into the nationwide database pursuant to Section 63G-2-603.

(5) School.

(a) Affirmative duties. A school that fails to fulfill any affirmative duty shall be subject to discipline under Sections 61-2c-401 through 405. A school shall:

(i) within 15 calendar days of any material change in the information outlined in R162-2c-203(1)(b), provide to the division written notice of the change;

(ii) with regard to the criminal history disclosure required under R162-2c-203(1)(b)(ix),

(A) obtain each student's signature before allowing the

student to participate in course instruction;

(B) retain each signed criminal history disclosure for a minimum of two years; and

(C) make any signed criminal history disclosure available to the division upon request;

(iii) maintain a record of each student's attendance for a minimum of five years after enrollment;

(iv) upon request of the division, substantiate any claim made in advertising materials;

(v) maintain a high quality of instruction;

(vi) adhere to all state laws and regulations regarding school and instructor certification;

(vii) provide the instructor(s) for each course with the required course content outline;

(viii) require instructors to adhere to the approved course content;

(ix) comply with a division request for information within 10 business days of the date of the request;

(x) upon completion of the course requirements, provide a certificate of completion to each student; and

(xi) ensure that the material is current in courses taught on:

(A) Utah statutes;

(B) Utah administrative rules;

(C) federal laws; and

(D) federal regulations.

(b) Prohibited conduct. A school that engages in any prohibited activity shall be subject to discipline under Sections 61-2c-401 through 405. A school may not:

(i) accept payment from a student without first providing to that student the information outlined in R162-2c-203(1)(b)(vi) through (ix);

(ii) continue to operate after the expiration date of the school certification and without renewing;

(iii) continue to offer a course after its expiration date and without renewing;

(iv) allow an instructor whose instructor certification has expired to continue teaching;

(v) allow an individual student to earn more than eight credit hours of education in a single day;

(vi) award credit to a student who has not complied with the minimum attendance requirements;

(vii) allow a student to obtain credit for all or part of a course by taking an examination in lieu of attending the course;

(viii) give valuable consideration to a person licensed with the division under Section 61-2c for referring students to the school;

(ix) accept valuable consideration from a person licensed with the division under Section 61-2c for referring students to a licensed mortgage entity;

(x) allow licensed mortgage entities to solicit prospective mortgage loan originators at the school during class time or during the 10-minute break that is permitted during each hour of instruction;

(xi) require a student to attend any program organized for the purpose of solicitation;

(xii) make a misrepresentation in its advertising;

(xiii) advertise in any manner that denigrates the mortgage profession;

(xiv) advertise in any manner that disparages a competitor's services or methods of operation;

(xv) advertise or teach any course that has not been certified by the division;

(xvi) advertise a course with language that indicates division approval is pending or otherwise forthcoming; or

(xvii) attempt by any means to obtain or to use in its educational offerings the questions from any mortgage examination unless the questions have been dropped from the

current bank of exam questions.

(6) Instructor.

(a) Affirmative duties. An instructor who fails to fulfill any affirmative duty shall be subject to discipline under Sections 61-2c-401 through 405. An instructor shall:

(i) adhere to the approved outline for any course taught; and

(ii) comply with a division request for information within 10 business days of the date of the request.

(b) Prohibited conduct. An instructor who engages in any prohibited activity shall be subject to discipline under Sections 61-2c-401 through 405. An instructor may not:

(i) continue to teach any course after the instructor's certification has expired and without renewing the instructor's certification; or

(ii) continue to teach any course after the course has expired and without renewing the course certification.

R162-2c-301b. Employee Incentive Program.

(1)(a) Under this Subsection R162-2c-301b, a licensed entity may pay an incentive to a mortgage loan originator who is sponsored by the entity and licensed in:

(i) Utah; or

(ii) another state.

(b) A licensed entity may not pay an incentive to an unlicensed employee.

(2) A PLM or entity that uses an incentive program shall:

(a) prior to paying any incentive to an individual, specifically describe in the individual's contract for employment:

(i) the methodology by which any incentive will be calculated, including the limitation specified in Subsection (2)(b); and

(ii) the circumstances under which an incentive will be paid, including the limitation specified in this Subsection (2)(c); and

(b) limit the dollar amount or value of any single incentive to \$300 or less;

(c) limit the sponsored mortgage loan originator to receiving no more than three incentive payments in a calendar year; and

(d)(i) keep complete records of all incentive payments made, including:

(A) borrower name;

(B) property address;

(C) transaction closing date;

(D) date of incentive payment;

(E) name of employee receiving incentive payment; and

(F) amount paid; and

(ii) make such records available to the division for audit or inspection upon request.

(3) Before paying an incentive to a mortgage loan originator who is not licensed in Utah, the PLM or entity shall ensure that the individual did not:

(a) solicit or advertise to the client regarding financing for a Utah property; or

(b) perform any other activity that constitutes the business of residential mortgage loans pursuant to Section 61-2c-102(1)(h).

R162-2c-302. Requirements for Record Retention and Disposal.

(1) Record Retention.

(a) An entity licensed under the Utah Residential Mortgage Practices Act shall maintain and safeguard for the period set forth in Section 61-2c-302 the following records:

(i) application forms;

(ii) disclosure forms;

- (iii) truth-in-lending forms;
 - (iv) credit reports and the explanations therefor;
 - (v) conversation logs;
 - (vi) verifications of employment, paycheck stubs, and tax returns;
 - (vii) proof of legal residency, if applicable;
 - (viii) appraisals, appraisal addenda, and records of communications between the appraiser and the registrant, licensee, and lender;
 - (ix) underwriter denials;
 - (x) notices of adverse action;
 - (xi) loan approval;
 - (xii) name and contact information for the borrower in the transaction; and
 - (xiii) all other records required by underwriters involved with the transaction or provided to a lender.
- (b) Records may be maintained electronically if the storage system complies with Title 46 Chapter 04, Utah Uniform Electronic Transactions Act.
- (c) A licensed entity shall make all records available to the division pursuant to Section 61-2c-302(3).
- (d) An individual who terminates sponsorship with an entity shall turn over to the entity any records in the individual's possession at the time of termination.
- (2) Record Disposal. A person who disposes of records at the end of the retention period shall destroy personal information by shredding, erasing, or otherwise making the information indecipherable.
- (3) Responsible Party.
- (a) If a licensed entity is actively engaged in the business of residential mortgage loans, the PLM is responsible for proper retention, maintenance, safeguarding, and disposal of records.
- (b) If a licensed entity ceases doing business in Utah, the control person(s) as of its last day of operation are responsible for proper retention, maintenance, safeguarding, and disposal of records.

R162-2c-401. Administrative Proceedings.

- (1) Request for agency action.
- (a) If completed in full and submitted in compliance with the rules promulgated by the division, the following shall be deemed a request for agency action under Utah Administrative Procedures Act, Section 63G-4-102, et seq.:
 - (i) an original or renewal application for a license;
 - (ii) an original or renewal application for a school certification;
 - (iii) an original or renewal application for a course certification; and
 - (iv) an original or renewal application for an instructor certification.
- (b) Any other request for agency action shall:
 - (i) be in writing;
 - (ii) be signed by the requestor; and
 - (iii) comply with Utah Administrative Procedures Act, Section 63G-4-201(3).
- (c) The following shall not be deemed a request for agency action under Utah Administrative Procedures Act, Section 63G-4-102, et seq., even if submitted in compliance with this Subsection (1)(b):
 - (i) a complaint against a licensee; and
 - (ii) a request that the division commence an investigation or a disciplinary action against a licensee.
- (2) Formal adjudicative proceedings. An adjudicative proceeding conducted subsequent to the issuance of a cease and desist order shall be conducted as a formal adjudicative proceeding.
- (3) Informal adjudicative proceedings.
 - (a) All adjudicative proceedings as to any matter not

specifically designated as requiring a formal adjudicative proceeding shall be conducted as informal adjudicative proceedings. These informal proceedings shall include:

- (i) a proceeding on an original or renewal application for a license;
- (ii) a proceeding on an original or renewal application for a school, instructor, or course certification; and
- (iii) except as provided in Section 63G-4-502, a proceeding for disciplinary action commenced by the division pursuant to Section 63G-4-201(2) following investigation of a complaint.

(b) A hearing shall be held in an informal adjudicative proceeding only if required or permitted by the Utah Residential Mortgage Practices and Licensing Act or by these rules.

(4) Hearings not allowed. A hearing may not be held in the following informal adjudicative proceedings:

- (a) the issuance of an original or renewed license when the application has been approved by the division;
- (b) the issuance of an original or renewed school certification, instructor certification, or course certification when the application has been approved by the division;
- (c) the issuance of any interpretation of statute, rule, or order, or the issuance of any written opinion or declaratory order determining the applicability of a statute, rule or order, when enforcement or implementation of the statute, rule or order lies within the jurisdiction of the division;
- (d) the denial of an application for an original or renewed license on the ground that it is incomplete;
- (e) the denial of an application for an original or renewed school, instructor, or course certification on the ground that it does not comply with the requirements stated in these rules; or

(f) a proceeding on an application for an exemption from a continuing education requirement.

(5) Hearings required. A hearing before the commission shall be held in the following circumstances:

- (a) a proceeding commenced by the division for disciplinary action pursuant to Section 61-2c-402 and Section 63G-4-201(2);
- (b) an appeal of a division order denying or restricting a license; and
- (c) an application that presents unusual circumstances such that the division determines that the application should be heard by the commission.

(6) Procedures for hearings in informal adjudicative proceedings.

(a) The division director shall be the presiding officer for any informal adjudicative proceeding unless the matter has been delegated to the chairperson of the commission or an administrative law judge.

(b) All informal adjudicative proceedings shall adhere to procedures as outlined in:

- (i) Utah Administrative Procedures Act Title 63G, Chapter 4;
- (ii) Utah Administrative Code Section R151-4 et seq.; and

(iii) the rules promulgated by the division.

(c) Except as provided in Subsection 7(b), a party is not required to file a written answer to a notice of agency action from the division in an informal adjudicative proceeding.

(d) In any proceeding under this Subsection, the commission and the division may at their discretion delegate a hearing to an administrative law judge or request that an administrative law judge assist the commission and the division in conducting the hearing. Any delegation of a hearing to an administrative law judge shall be in writing.

(e) Upon the scheduling of a hearing by the division and at least 30 days prior to the hearing, the division shall, by first

class postage pre-paid delivery, mail to the address last provided to the division pursuant to Section 61-2c-106 or Subsection R162-2c-201, as applicable, written notice of the date, time, and place scheduled for the hearing.

(f) Formal discovery is prohibited.

(g) The division may issue subpoenas or other orders to compel production of necessary and relevant evidence:

(i) on its own behalf; or

(ii) on behalf of a party where:

(A) the party makes a written request;

(B) assumes responsibility for effecting service of the subpoena; and

(C) bears the costs of the service, any witness fee, and any mileage to be paid to the witness.

(h) Upon ordering a licensee to appear for a hearing, the division shall provide to the licensee the information that the division will introduce at the hearing.

(i) The division shall adhere to Title 63G, Chapter 2, Government Records Access and Management Act in addressing a request for information obtained by the division through an investigation.

(j) The division may decline to provide a party with information that it has previously provided to that party.

(k) Intervention is prohibited.

(l) Hearings shall be open to all parties unless the presiding officer closes the hearing pursuant to:

(i) Title 63G, Chapter 4, the Utah Administrative Procedures Act; or

(ii) Title 52, Chapter 4, the Open and Public Meetings Act.

(m) Upon filing a proper entry of appearance with the division pursuant to R151-4-110(1)(a), an attorney may represent a respondent.

(7) Additional procedures for disciplinary proceedings.

(a) The division shall commence a disciplinary proceeding by filing and serving on the respondent:

(i) a notice of agency action;

(ii) a petition setting forth the allegations made by the division;

(iii) a witness list, if applicable; and

(iv) an exhibit list, if applicable.

(b) Answer.

(i) At the time the petition is filed, the presiding officer, upon a determination of good cause, may require the respondent to file an answer to the petition by so ordering in the notice of agency action.

(ii) The respondent may file an answer, even if not ordered to do so in the notice of agency action.

(iii) Any answer shall be filed with the division within thirty days after the mailing date of the notice of agency action and petition.

(c) Witness and exhibit lists.

(i) The division shall provide its witness and exhibit list to the respondent at the time it mails its notice of hearing.

(ii) The respondent shall provide its witness and exhibit list to the division no later than thirty days after the mailing date of the division's notice of agency action and petition.

(iii) Any witness list shall contain:

(A) the name, address, and telephone number of each witness; and

(B) a summary of the testimony expected from each witness.

(iv) Any exhibit list:

(A) shall contain an identification of each document or other exhibit that the party intends to use at the hearing; and

(B) shall be accompanied by copies of the exhibits.

(d) Pre-hearing motions.

(i) Any pre-hearing motion permitted under the Administrative Procedures Act or the rules promulgated by

the Department of Commerce shall be made in accordance with those rules.

(ii) The division director shall receive and rule upon any pre-hearing motions.

R162-2c-402. Disciplinary Action.

In reviewing a request to convert a revocation to a suspension pursuant to Section 61-2c-402(4)(a):

(1) The commission may not convert a revocation that was based on a felony conviction involving fraud, misrepresentation, deceit or dishonesty, breach of trust, or money laundering.

(2) The commission may consider converting a revocation that was based on other criminal history, including:

(a) a plea in abeyance, diversion agreement, or similar disposition of a felony charge; and

(b) a misdemeanor offense, regardless of the nature of the charge or the disposition of the case.

R162-2c-501a. Optional Experience Equivalency Calculation.

(1) Thirty months of full-time experience in the following activities shall be considered equivalent to one year of experience as a first-lien residential mortgage loan originator:

(a) loan underwriter;

(b) mortgage loan manager;

(c) loan processor;

(d) certified mortgage prelicensing instructor; and

(e) second-lien residential loan originator.

(2) An applicant who wishes to receive experience credit under this Subsection R162-2c-501a, but who cannot demonstrate experience equivalent to a full year of first-lien residential mortgage loan origination shall:

(a) be awarded experience credit as deemed appropriate by the division; and

(b) complete the experience requirement through additional experience as a first-lien residential mortgage loan originator, as determined by the division.

R162-2c-501b. Optional Experience Points Table.

TABLE
APPENDIX 3 - OPTIONAL EXPERIENCE TABLE

Professional activity	possible points
(1) Loan underwriter	0.5 pt/month
(2) Mortgage loan manager	0.5 pt/month
(3) Loan processor	0.5 pt/month
(4) Certified mortgage prelicensing instructor	0.5 pt/month
(5) Second-lien residential loan originator	0.5 pt/month

KEY: residential mortgage, loan origination, licensing, enforcement

February 10, 2015

61-2c-103(3)

Notice of Continuation March 31, 2015

61-2c-402(4)(a)

R164. Commerce, Securities.**R164-15. Federal Covered Securities.****R164-15-1. Notice Filings for Offerings of Investment Company Securities.****(A) Authority and purpose.**

(1) The Division enacts this rule under authority granted by Sections 61-1-15.5 and 61-1-24.

(2) The rule requires a notice filing prior to the offer or sale of securities described in Subsection 61-1-15.5(1) and sets forth the filing procedure.

(3) The rule also authorizes optional electronic filing of notices.

(B) Definitions

(1) "Designee" means any person or entity authorized and recognized by the Division in this rule to accept filings on behalf of the Division by electronic or other means of communication.

(2) "Division" means the Division of Securities, Utah Department of Commerce.

(3) "NASAA" means the North American Securities Administrators Association, Inc.

(4) "SEC" means the United States Securities and Exchange Commission.

(C) Filing requirements

(1) Prior to the offer or sale of a security which is a covered security under Section 18(b)(2) of the Securities Act of 1933, the issuer must submit to the Division or its designee the following:

(1)(a) A completed manually signed NASAA Form NF;

(1)(b) A completed manually signed NASAA Form U-2 - Uniform Consent to Service of Process; and

(1)(c) A fee as specified in the Division's fee schedule.

(2) The issuer may submit a copy of all documents that are part of the federal registration statement filed with the SEC as a substitute for NASAA Form NF.

(3) Upon written request of the Division and within the time period set forth in the request, the issuer must submit to the Division a copy of any document, identified in the request, that is part of the federal registration statement filed with the SEC or is part of an amendment to such federal registration statement.

(4) All securities included in the same prospectus may be covered under a single notice filing.

(5) An issuer who has filed a Form U-2 in connection with a previous notice filing need not file another.

(D) Term of notice filing

(1) Except as provided in Subparagraph (D)(2), a notice filing under Paragraph (C) is effective for one year from the date filed with the Division or its designee.

(2) A notice filing under Paragraph (C) for a unit investment trust is for an indefinite period of time from the date filed with the Division or its designee.

(3) To facilitate the coordination of expiration dates with other states, the issuer may request a specific term of effectiveness which does not exceed one year.

(E) Renewal

A notice filing, for which the term is about to expire, may be renewed by submitting to the Division or its designee, another notice and payment of the applicable fee in accordance with Paragraph (C).

(F) Amendments

(1) The materials filed pursuant to Paragraph (C) may be amended by forwarding the corrected information to the Division or its designee and requesting that the file be amended accordingly.

(2) No fee is required for an amendment.

(G) Recognized designee

(1) The Division authorizes and recognizes the Securities Registration Depository, Inc. as a designee to

receive notice filings under this rule on behalf of the Division, including but not limited to notices, fees, and all documents that are part of a federal registration statement filed with the SEC under the Securities Act of 1933.

(2) The designation provided in this rule is for the sole purpose of receiving filings on behalf of the Division and then transmitting those documents to the Division, or for any other purpose which the Division may prescribe by order or release.

(H) Sales Report

Within 30 days of the close of the offering or when the issuer ceases to rely upon the notice, whichever occurs first, unit investment trusts shall file a sales report on NASAA Form NF. No sales report is required for open-end management investment companies.

R164-15-2. Notice Filings for Rule 506 Offerings.**(A) Authority and purpose.**

(1) The Division enacts this rule under authority granted by Sections 61-1-15.5 and 61-1-24.

(2) The rule requires a notice filing within 15 days after the first sale in this state of securities described in Subsection 61-1-15.5(2) and sets forth the filing procedure.

(3) This rule is hereby amended to recognize the following:

(3)(a) The amendment of Regulation D by the Securities and Exchange Commission (SEC) to authorize the filing of Form D in electronic format with the SEC through the Electronic Data Gathering, Analysis, and Retrieval System (EDGAR) in accordance with EDGAR rules set forth in Regulation S-T (17 CFR Part 232) as described in Securities and Exchange Commission Securities Act Release No. 8891; and

(3)(b) The establishment of the Electronic Filing Depository (EFD), operated by the North American Securities Administrators Association, Inc. (NASAA) to receive and store all Form D notice filings and amendments (17 CFR 239.500) and to collect filing fees on behalf of the Division.

(B) Definitions

(1) "Division" means the Division of Securities, Utah Department of Commerce.

(2) "NASAA" means the North American Securities Administrators Association, Inc.

(3) "EFD" means the Electronic Filing Depository established and maintained by NASAA.

(C) Designation and filing requirements

(1) For all notice filings authorized by Subsection 61-1-15.5(2), the Division hereby designates EFD to receive and store all notice filings made on SEC Form D (17 CFR 239.500) and to collect related filing fees on behalf of the Division.

(2) Unless otherwise provided, upon notice in paragraph (C)(3) below, all Form D notice filings, amendments, and related filing fees shall be filed electronically with and transmitted to EFD.

(3) Notwithstanding paragraph (C)(2) of this rule, the electronic filing of Form D notice filings and amendments and the collection of related processing fees shall not be required until such time as EFD provides for receipt of such filings and fees and thirty (30) days notice is provided by the Division. Any documents or fees required to be filed with the Division that are not permitted to be filed with, or cannot be accepted by, EFD shall be filed directly with the Division.

(4) A duly authorized person of the issuer shall affix his or her electronic signature to the Form D filing by typing his or her name in the appropriate fields and submitting the filing to EDGAR. Submission of a filing in this manner shall constitute irrefutable evidence of legal signature by any individual whose name is typed on the filing both for

purposes of authorizing the disclosures in the Form as well as giving effect to any consent to service provisions found therein.

(5) Subsequent to the expiration of the notice period in paragraph (C)(3), no filing, partial filing, or filing fee submitted to the Division by means other than EFD shall act to grant such a filing the status of being duly received by the Division for any purpose relating to the timeliness of the filing or the avoidance of the assessment of any late filing fee.

(D) Filing requirements prior to Paragraph (C)(3) notice

(1) An issuer offering a security that is a covered security under section 18(b)(4)(D) of the Securities Act of 1933 must file with the Division or its designee, no later than 15 days after the first sale of such federal covered security in this state, an initial notice and a filing fee as follows:

(1)(a) The issuer shall file an initial notice on SEC Form D. For Purposes of Subsection 61-1-15.5(2), the initial notice on SEC Form D shall consist of a copy of the notice of sales on Form D filed in electronic format with the SEC through the Electronic Data Gathering, Analysis, and Retrieval System (EDGAR) in accordance with EDGAR rules set forth in Regulation S-T (17 CFR Part 232) and in effect on September 15, 2008.

(1)(b) Such form shall be manually signed by a person duly authorized by the issuer;

(1)(c) The issuer shall include with the initial notice a statement indicating:

(1)(c)(i) The date of the first sale of securities in the state of Utah; or

(1)(c)(ii) That sales have yet to occur in the state of Utah; and

(1)(d) The issuer shall submit a fee as specified in the Division's fee schedule.

(2) An issuer may file an amendment to a previously filed notice of sales on Form D at any time and must file such an amendment to correct a material mistake of fact or error in the previously filed notice of sales on Form D, as soon as practicable after discovery of the mistake or error.

(3) An issuer that files an amendment to a previously filed notice of sales on Form D must provide current information in response to all requirements of the notice of sales on Form D regardless of why the amendment is filed.

KEY: mutual funds, securities, securities regulation

March 10, 2015

61-1-15.5

Notice of Continuation July 25, 2012

61-1-24

R277. Education, Administration.**R277-111. Sharing of Curriculum Materials by Public School Educators.****R277-111-1. Definitions.**

A. "Board" means the Utah State Board of Education.

B. "Creative Commons License" means copyright licenses that grant certain rights such as the right to distribute the copyrighted work without changes, at no charge. Works licensed under a Creative Commons License is protected by copyright applicable law. Creative Commons Licenses are non-exclusive and non-revocable.

C. "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.

D. "LEA materials" means materials purchased or developed by an LEA using LEA funds or resources, including materials, resources or activities which the LEA requested employees to create, develop or compile during the employees' contract time.

E. "Material(s)" means all copyrightable works, including writings, lectures, musical or dramatic compositions, sound recordings, films, videotapes and other pictorial or technological reproductions, computer programs, listings, charts, manuals, codes, instructions and software.

F. "Non-commercial use" means use or exchange without payment or compensation of any kind.

G. "Personally developed materials" means materials developed by an educator. These materials may be developed on the educator's contract time using school resources, on the educator's personal time using personal resources, as an individual employment assignment, or in conjunction with other colleagues.

H. "Teacher curriculum materials" means lesson plans, educator research materials, activities, teaching strategies or other printed or electronic materials developed by the public educator.

R277-111-2. Authority and Purpose.

A. This rule is authorized by Utah Constitution Article X, Section 3 which vests general control and supervision of Public Education in the Board, Section 53A-1-401(3) which allows the Board to adopt rules in accordance with its responsibilities, and by Section 53A-1-402(1)(e) which directs the Board to encourage school productivity and cost effectiveness measures.

B. The purpose of this rule is to provide information and assurance to public school educators about sharing materials created or developed by educators primarily for use in their own classes or assignments. The intent of this rule is to allow or encourage educators to use valuable time and resources to improve instruction and instructional practices with assistance from appropriate materials developed by other educators.

R277-111-3. Educators Sharing Materials.

A. Utah educators may share materials for noncommercial use that educators have developed primarily for use in their own classes, courses or assignments.

B. Utah educators may only share materials that they developed personally and may not unilaterally share materials that were purchased or developed by or on behalf of their public employer or the State.

C. Utah educators may only share materials that are consistent with R277-515 Utah Educator Professional Standards. For example, educators may not share materials that advocate illegal activities or that are inconsistent with their legal and role model responsibilities as public employees and licensed educators.

D. Utah educators may share materials under a Creative

Commons License and shall be personally responsible for understanding and satisfying the requirements of a Creative Commons License.

E. The presumption of this rule is that materials may be shared. The presumption is that Utah educators need not seek permission from their employers to share personally-developed materials.

F. Public educators may not sell teacher curriculum materials developed in whole or in part with public education funds or developed within the employee's scope of employment to Utah educators.

R277-111-4. LEA Rights.

A. Utah LEAs may develop and make available a policy that directs employees to seek review and approval before employees share materials that were developed on contract time, developed partially or jointly with LEA funding, as part of an LEA assignment or if materials reference or imply LEA use or endorsement.

B. Utah LEAs may prohibit their employees from sharing materials that were purchased with LEA funds or which are licensed specifically for LEA use.

KEY: curriculum materials, sharing**March 10, 2015****Notice of Continuation January 15, 2015**

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

R277. Education, Administration.**R277-468. Parent/Guardian Review of Public Education Curriculum and Review of Complaint Process.****R277-468-1. Definitions.**

A. "Board" means the Utah State Board of Education.

B. "Instructional materials" means systematically arranged content in text or digital format which may be used within the state curriculum framework for grade levels or courses of study by students in public schools including text books, workbooks, computer software, online or Internet courses, CDs or DVDs and multiple forms of communication media. Such materials may be used by students or teachers or both as principal sources of study to cover any portion of the grade level or course. These materials:

- (1) shall be designed for student use;
- (2) may be accompanied by or contain teaching guides and study helps;
- (3) shall include all text books, workbooks and student materials and supplements necessary for a student to fully participate in coursework; and
- (4) shall be high quality, research-based and prove to be effective in supporting student learning.

C. "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.

D. "Parent or guardian" means the individual that establishes the residency of the child under Sections 53A-2-201, 53A-2-202, or 53A-2-207 or another applicable Utah guardianship provision.

E. "Primary instructional materials" means comprehensive or basal Core textbook or integrated instructional program for which a publisher seeks a recommendation for Core subjects as outlined in Sections R277-700-4, 5 or 6.

R277-468-2. Authority and Purpose.

A. This rule is authorized under Utah Constitution Article X, Section 3 which vests general control and supervision over public education in the Board, Sections 53A-1-402(1)(b) and (c) which requires the Board to establish rules regarding competency levels, graduation requirements, school accreditation, curriculum and instruction requirements, and school libraries, and Section 53A-1-401(3) which allows the Board to adopt rules in accordance with its responsibilities.

B. The purpose of this rule is to direct LEAs, consistent with the Board's responsibility to involve parents in the adoption and review of LEA primary instructional materials to support Utah Core Standards, and to include parents in reviewing complaints specific to primary curriculum materials.

R277-468-3. LEA Board Responsibilities.

A. Each LEA shall involve parents who have students who attend LEA schools and instructional staff in the consideration of LEA-purchased instructional materials.

B. Each LEA shall include parents in reviewing complaints specific to primary curriculum materials.

C. LEAs may seek assistance from parent organizations or associations or other groups to recruit and select parent members for materials and complaint reviews.

R277-468-4. USOE Responsibilities.

A. The USOE shall develop and make readily available to LEAs suggestions for effective parent participation in the instructional materials review process and the complaint review process.

B. The USOE shall assist LEAs in policy development,

upon request and to the extent of resources available.

KEY: parent/guardian, committees, curriculum, complaints

March 10, 2015

**Art X Sec 3
53A-1-402(1)(b)
53A-1-402(1)(c)
53A-1-401(3)**

R307. Environmental Quality, Air Quality.**R307-120. General Requirements: Tax Exemption for Air Pollution Control Equipment.****R307-120-1. Applicability.**

This rule shall apply to purchases described in Section 19-12-201.

R307-120-2. Definitions.

The following definitions apply to R307-120:

"Freestanding pollution control property" means freestanding pollution control property as defined in Section 19-12-102.

"Pollution control facility" means pollution control facility as defined in Section 19-12-102.

R307-120-3. Application for Certification.

(1) An application for certification shall be made on the form provided by the director.

(2) The application shall include all information requested thereon and such additional information as is requested by the director. At a minimum, the application shall contain:

- (a) a description of the pollution control facility or the freestanding pollution control property;
- (b) a description of the property, part, product, or service for a purchase or lease of property, a part, a product or a service for which a person seeks to claim a sales and use tax exemption under Section 19-12-201;
- (c) the existing or proposed operation procedure for the pollution control facility or freestanding pollution control property; and
- (d) a statement of the purpose served or to be served by the pollution control facility or freestanding pollution control property.

(3) Applications for certification shall include:

- (a) a reference to the approval order issued under R307-401-8 that requires the pollution control facility or the freestanding pollution control property; or
- (b) a reference to the section of the State Implementation Plan that requires the pollution control facility or the freestanding pollution control property; or
- (c) an estimate of emission reductions (in tons per year) resulting from the use of the pollution control facility or the freestanding pollution control property.

(4) The director may require an application to contain additional information that the director finds necessary to determine whether to grant certification under Section 19-12-303.

R307-120-4. Issuance of Certification.

(1) The filing date of the application shall be the date the director receives a complete application with all of the information as described in R307-120-3. Within 120 days of the filing date of the application, the director will:

- (a) issue a written certification of the pollution control facility or the freestanding pollution control property; or
- (b) provide a written statement of the reason for the denial of certification.

(2) The director shall issue a certification of a pollution control facility or a freestanding pollution control property to the applicant if the director determines that:

- (a) the application meets the requirements of Section 19-12-301(3) or 19-12-302(2);
- (b) the facility or property that is the subject of the application is a pollution control facility or a freestanding pollution control property.
- (c) the person who files the application is a person described in Section 19-12-301(1) or 19-12-302(1); and
- (d) the purchases or leases for which the person seeks to

claim a sales and use tax exemption are exempt under Section 19-12-201.

(3) The director may issue one certification for one or more pollution control facilities or freestanding pollution control properties that constitute an operational unit.

(4) If the director does not issue or deny a certification within 120 days after the date a person files an application, the director shall issue a certification to the person at the person's request.

R307-120-5. Exemptions from Certification.

The director shall not issue a certification for the following:

- (1) a replacement of freestanding pollution control property; or
- (2) property, a part, a product, or a service described in Sections 19-12-201(1)(b) through (e) used or performed in a repair or replacement related to:
 - (a) a pollution control facility; or
 - (b) a freestanding pollution control property.
- (3) a pollution control facility or a freestanding pollution control property that has already received a certification under R307-120-5.

R307-120-6. Appeal and Revocation.

(1) A decision of the director may be reviewed by filing a Request for Agency Action as provided in R305-7.

(2) The director may revoke a certification issued under Section 19-12-303 if the director makes a determination as contained in Section 19-12-304.

KEY: air pollution, tax exemptions, equipment

March 5, 2015

Notice of Continuation February 1, 2012

19-12-101
19-12-102
19-12-201
19-12-202
19-12-203
19-12-301
19-12-302
19-12-303
19-12-304
19-12-305

R307. Environmental Quality, Air Quality.**R307-311. Utah County: Trading of Emission Budgets for Transportation Conformity.****R307-311-1. Purpose.**

This rule establishes the procedures that may be used to trade a portion of the primary PM10 budget when demonstrating that a transportation plan, transportation improvement program, or project conforms with the motor vehicle emission budgets in the Utah County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)"

Transportation conformity for primary PM10 shall be demonstrated using the remainder of the primary PM10 budget described in (a)(iii).

(c) The primary PM10 budget shall not be supplemented by using a portion of the NOx budget.

KEY: air pollution, transportation conformity, PM10

March 5, 2015

19-2-104

R307-311-2. Definitions.

The definitions contained in 40 CFR 93.101, effective as of the date referenced in R307-101-3, are incorporated into this rule by reference. The following additional definitions apply to this rule.

"Budget" means the motor vehicle emission projections used in the attainment demonstration in the Utah County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)."

"NOx" means oxides of nitrogen.

"Primary PM10" means PM10 that is emitted directly by a source. Primary PM10 does not include particulate matter that is formed when gaseous emissions undergo chemical reactions in the ambient air.

"Transportation Conformity" means a demonstration that a transportation plan, transportation improvement program, or project conforms with the emissions budgets in a state implementation plan, as outlined in 40 CFR, Chapter 1, Part 93, "Determining Conformity of Federal Actions to State or Federal Implementation Plans."

R307-311-3. Applicability.

(1) This rule applies to agencies responsible for demonstrating transportation conformity with the Utah County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)."

(2) This rule does not apply to emission budgets from Section IX, Part C.6 of the State Implementation Plan, "Carbon Monoxide Maintenance Plan."

R307-311-4. Trading Between Emission Budgets.

(1) The agencies responsible for demonstrating transportation conformity are authorized to supplement the budget for NOx with a portion of the budget for primary PM10 for the purpose of demonstrating transportation conformity for NOx. The NOx budget shall be supplemented using the following procedures.

(a) The metropolitan planning organization shall include the following information in the transportation conformity demonstration:

(i) The budget for primary PM10 and NOx for each required year of the conformity demonstration, before trading allowed by this rule has been applied;

(ii) The portion of the primary PM10 budget that will be used to supplement the NOx budget, specified in tons per day using a 1:1 ratio of primary PM10 to NOx, for each required year of the conformity demonstration;

(iii) The remainder of the primary PM10 budget that will be used in the conformity demonstration for primary PM10, specified in tons per day for each required year of the conformity demonstration; and

(iv) The budget for primary PM10 and NOx for each required year of the conformity demonstration after the trading allowed by this rule has been applied.

(b) Transportation conformity for NOx shall be demonstrated using the NOx budget supplemented by a portion of the primary PM10 budget as described in (a)(ii).

R309. Environmental Quality, Drinking Water.**R309-100. Administration: Drinking Water Program.****R309-100-1. Purpose.**

The purpose of this rule is to set forth the water quality and drinking water standards for public water systems.

R309-100-2 Authority.

R309-100-3 Definitions.

R309-100-4 General.

R309-100-5 Approval of Plans and Specifications for Public Water Supply Projects.

R309-100-6 Feasibility Studies.

R309-100-7 Sanitary Survey and Evaluation of Existing Facilities.

R309-100-8 Rating System.

R309-100-9 Orders and Emergency Actions.

R309-100-10 Variances.

R309-100-11 Exemptions.

R309-100-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-100-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-100-4. General.

These rules shall apply to all public drinking water systems within the State of Utah.

(1) A public drinking water system is a system, either publicly or privately owned, providing water for human consumption and other domestic uses, which:

(a) Has at least 15 service connections,

(i) Delivery of drinking water, such as by a single well, to a portion of a platted subdivision or a portion of a contiguous development, either of which is under the same ownership or control, shall be considered a single public drinking water system; and

(ii) A platted subdivision or other contiguous development of 15 or more lots, under the same ownership or control, is considered to have the corresponding number of connections as there are lots; or

(b) Serves an average of at least 25 individuals daily at least 60 days out of the year.

(i) A ratio of 3.13 persons per connection shall be used to calculate the individuals served unless, at the time of operation, more accurate information is available. The ratio is based on the statewide average persons per residence in the 2000 census.

(ii) Notwithstanding the threshold for the number of service connections set forth in (a), a drinking water system consisting of at least 8 service connections is considered to serve 25 people, based on the ratio in (b)(i), and consequently is classified as a public drinking water system, unless, at the time of operation, more accurate data can be used.

(iii) The ratio in (b)(i) is only be used to determine whether, prior to construction or modification, any particular water system is considered to be a public water system.

(c) Any person or entity may request a review of the designation of a public water system by submitting documentation to the Director showing that the drinking water system, upon complete build out, falls below both thresholds listed in (a) and (b) above. All decisions made by the Director under this provision may be challenged as provided in Section 19-1-301.5 and R305-7.

(2) Submetered Properties.

(a) Submetered Properties means a billing process by which a property owner (or association of property owners, in the case of co-ops or condominiums) bills tenants based on metered total water use; the property owner is then responsible for payment of a water bill from a public water system.

(b) A property owner who installs submeters to track usage of water by tenants on his or her property shall not be subject to these rules solely as a result of taking the administrative act of submetering and billing.

(c) Owners of submetered properties shall receive all their water from a regulated public water system to qualify under the terms of R309-105-5 for exemption from monitoring requirements, except as to the selling of water.

(d) This is not intended to exempt systems where the property in question has a large distribution system (piping in excess of 500 feet in length and sized larger than the normal service lateral based on a fixture unit analysis) serves a large population or serves a mixed (commercial/residential) population (e.g. many military installations/facilities or large mobile home parks or P.U.D's) from regulation as a public drinking water system as pertains to notifying the Division of the persons indicated below in (5) or plan review of modifications or changes to their systems (refer to R309-500).

(3) The term public drinking water system includes collection, treatment, storage or distribution facilities under control of the operator and used primarily in connection with the system. Additionally, the term includes collection, pretreatment or storage facilities used primarily in connection with the system but not under such control (see 19-4-102 of the Utah Code Annotated).

(4) Categories of Public Drinking Water Systems

Public drinking water systems are divided into three categories, as follows:

(a) "Community water system" (CWS) means a public drinking water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

(b) "Non-transient, non-community water system" (NTNCWS) means a public water system that is not a community water system and that regularly serves at least 25 of the same nonresident persons over six months per year. Examples of such systems are those serving the same individuals (industrial workers, school children, church members) by means of a separate system.

(c) "Transient non-community water system" (TNCWS) means a non-community public water system that does not serve 25 of the same nonresident persons per day for more than six months per year. Examples of such systems are those, RV park, diner or convenience store where the permanent nonresident staff number less than 25, but the number of people served exceeds 25.

(d) The distinctions between "Community", "Non-transient, non-community", and "Transient Non-community" water systems are important with respect to monitoring and water quality requirements.

(5) Responsibility

(a) All public drinking water systems must have a person or organization designated as the owner of the system. The name, address and phone number of this person or organization shall be supplied, in writing, to the Director.

(b) The name of the person to be contacted on issues concerning the operation and maintenance of the system shall also be provided, in writing, to the Director.

R309-100-5. Approval of Plans and Specifications for Public Water Supply Projects.

(1) The Director must approve, in writing, all engineering plans and specifications for public drinking water

projects prior to construction.

(2) Refer to R309-105-6 and/or R309-500-6 for further requirements.

(3) Operating Permits shall be obtained by the public water system prior to placing any public drinking water facility into operation as required in R309-500-9.

R309-100-6. Feasibility Reviews.

(1) Upon the request of the local health department, the Department of Environmental Quality will conduct a review to determine the "feasibility" of adequate water supply for any proposed public water system (e.g. subdivisions, industrial plants or commercial facilities). Information submitted to the Department for consideration must be simultaneously submitted to the local health department. This feasibility review is a preliminary investigation of the proposed method of water supply and is done in conjunction with a review of proposed methods of wastewater disposal.

(2) Refer to the Department of Environmental Quality publication "Review Criteria for Establishing the Feasibility of Proposed Housing Subdivisions" available at the Division of Drinking Water.

R309-100-7. Sanitary Survey, Evaluation, and Corrective Action of Existing Facilities.

(1) The Director, after considering information gathered during sanitary surveys and facility evaluations, may make determinations of regulatory significance including: monitoring reductions or increases, treatment, variances and exemptions.

(2) CONDUCTING SANITARY SURVEYS

(a) The Director shall ensure a sanitary survey is conducted at least every three years on all public water systems. The Director may reduce this frequency to once every five years based on outstanding performance on prior sanitary surveys.

(b) Sanitary surveys conducted by the following individuals under the circumstances as listed, may be used by the Director for the above determinations:

- (i) Division of Drinking Water personnel;
- (ii) Utah Department of Environmental Quality District Engineers;
- (iii) local health officials;
- (iv) Forest Service engineers;
- (v) Utah Rural Water Association staff;
- (vi) consulting engineers; and
- (vii) other qualified individuals authorized in writing by the Director.

(3) Public water systems must provide the Director, at the Director's request, any existing information that will enable the State to conduct a sanitary survey.

(4) For the purposes of this subpart, a "sanitary survey", as conducted by the Director, includes but is not limited to, an onsite review of the water source(s) (identifying sources of contamination by using results of source water assessments or other relevant information where available), facilities, equipment, operation, maintenance, and monitoring compliance of a public water system to evaluate the adequacy of the system, its sources and operations and the distribution of safe drinking water.

(5) The sanitary survey must include an evaluation of the applicable components listed in paragraphs (5)(a) through (h) of this section:

- (a) Source,
- (b) Treatment,
- (c) Distribution system,
- (d) Finished water storage,
- (e) Pumps, pump facilities, and controls,
- (f) Monitoring, reporting, and data verification,

(g) System management and operation, and

(h) Operator compliance with State requirements.

(6) CONDITIONS ON CONDUCT OF SANITARY SURVEYS

In order for the groups of individuals listed in R309-100-7(2)(b) to conduct sanitary surveys acceptable for consideration by the Director, the following criteria must be met:

(a) Surveys of all systems involving complete treatment plants must be performed by Division of Drinking Water staff or others authorized in writing by the Director;

(b) Local Health officials may conduct surveys of systems within their respective jurisdictions;

(c) U.S. Forest Service (USFS) engineers may conduct surveys of water systems if the system is owned and operated by the USFS or USFS concessionaires;

(d) Utah Rural Water Association staff may conduct surveys of water systems if the system's population is less than 10,000;

(e) Consulting Engineers under the direction of a Registered Professional Engineer;

(f) Other qualified individuals who are authorized in writing by the Director may conduct surveys.

(7) SANITARY SURVEY REPORT CONTENT

The Director will prescribe the form and content of sanitary survey reports and be empowered to reject all or part of unacceptable reports.

(8) ACCESS TO WATER FACILITIES

Department of Environmental Quality employees after reasonable notice and presentation of credentials, may enter any part of a public water system at reasonable times to inspect the facilities and water quality records, conduct sanitary surveys, take samples and otherwise evaluate compliance with Utah's drinking water rules. All others who have been authorized by the Director to conduct sanitary surveys must have the permission of the water system owner or designated representative before a sanitary survey may be conducted.

(9) CORRECTIVE ACTION

Public water systems must comply with requirements found in R309-215-16(3)(a)(iii), R309-215-16(3)(a)(iv), R309-215-16(3)(a)(v), R309-215-16(3)(a)(vi), and R309-215-16(3)(a)(vii).

(10) Refer to R309-100-8 and R309-105-6 for further requirements.

R309-100-8. Rating System.

The Director shall assign a rating to each public water supply in order to provide a concise indication of its condition and performance. The criteria to be used for determining a water system's rating shall be as set forth in R309-400.

R309-100-9. Orders and Emergency Actions.

(1) In situations in which a public water system fails to meet the requirements of these rules, the Director may issue an order to a water supplier to take appropriate protective or corrective measures.

(2) Failure to comply with these rules or with an order issued by the Director may result in the imposition of penalties as provided in the Utah Safe Drinking Water Act.

(3) The Director may respond to emergency situations involving public drinking water, including emergency situations as described in R309-105-18, in a manner appropriate to protect the public health. The Director's response may include the following:

- (a) Issuing press releases to inform the public of any confirmed or possible hazards in their drinking water.
- (b) Ordering water suppliers to take appropriate

measures to protect public health, including issuance of orders pursuant to 63G-4-502, if warranted.

R309-100-10. Variances.

- (1) Variances to the requirements of R309-200 of these rules may be granted by the Board to water systems which, because of characteristics of their raw water sources, cannot meet the required maximum contaminant levels despite the application of best technology and treatment techniques available (taking costs into consideration).
- (2) The variance will be granted only if doing so will not result in an unreasonable risk to health.
- (3) No variance from the maximum contaminant level for total coliforms are permitted.
- (4) No variance from the minimum filtration and disinfection requirements of R309-525 and R309-530 will be permitted for sources classified by the Director as directly influenced by surface water.
- (6) Within one year of the date any variance is granted, the Board shall prescribe a schedule by which the water system will come into compliance with the maximum contaminant level in question. The requirements of Section 1415 of the Federal Safe Drinking Water Act, PL 104-182, are hereby incorporated by reference. The Board shall provide notice and opportunity for public hearing prior to granting any variance or determining the compliance schedule. Procedures for giving notice and opportunity for hearing will be as outlined in 40 CFR Section 142.44.

R309-100-11. Exemptions.

- (1) The Board may grant an exemption from the requirements of R309-200 or from any required treatment technique if:
 - (a) Due to compelling factors (which may include economic factors), the public water system is unable to comply with contaminant level or treatment technique requirements, and
 - (b) The public water system was in operation on the effective date of such contaminant level or treatment technique requirement, and
 - (c) The granting of the exemption will not result in an unreasonable risk to health.
- (2) No exemptions from the maximum contaminant level for total coliforms are permitted.
- (3) No exemptions from the minimum disinfection requirements of R309-200-5(7) will be permitted for sources classified by the Director as directly influenced by surface water.
- (4) Within one year of the granting of an exemption, the Board shall prescribe a schedule by which the water system will come into compliance with contaminant level or treatment technique requirement. The requirements of Section 1416 of the Federal Safe Drinking Water Act, PL 104-182, are hereby incorporated by reference.
- (5) The Board shall provide notice and opportunity for an exemption hearing as provided in 40 CFR Section 142.54.

**KEY: drinking water, environmental protection,
administrative procedures**

February 3, 2011

Notice of Continuation March 13, 2015

19-4-104

R309. Environmental Quality, Drinking Water.**R309-105. Administration: General Responsibilities of Public Water Systems.****R309-105-1. Purpose.**

The purpose of this rule is to set forth the general responsibilities of public water systems, water system owners and operators.

R309-105-2 Authority.

R309-105-3 Definitions.

R309-105-4 General.

R309-105-5 Exemptions from Monitoring

Requirements.

R309-105-6 Construction of Public Drinking Water Facilities.

R309-105-7 Source Protection Plans.

R309-105-8 Existing Water System Facilities.

R309-105-9 Minimum Pressure.

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R309-105-15 Annual Reports.

R309-105-16 Reporting Test Results.

R309-105-17 Record Maintenance.

R309-105-18 Emergencies.

R309-105-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-105-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-105-4. General.

Water suppliers are responsible for the quality of water delivered to their customers. In order to give the public reasonable assurance that the water which they are consuming is satisfactory, the Board has established rules for the design, construction, water quality, water treatment, contaminant monitoring, source protection, operation and maintenance of public water supplies.

R309-105-5. Exemptions from Monitoring Requirements.

(1) The applicable requirements specified in R309-205, R309-210 and R309-215 for monitoring shall apply to each public water system, unless the public water system meets all of the following conditions:

(a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);
(b) Obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply;

(c) Does not sell water to any person; and

(d) Is not a carrier which conveys passengers in interstate commerce.

(2) When a public water system supplies water to one or more other public water systems, the Director may modify the monitoring requirements imposed by R309-205, R309-210 and R309-215 to the extent that the interconnection of the systems justifies treating them as a single system for monitoring purposes.

(3) In no event shall the Director authorize modifications in the monitoring requirements which are less stringent than requirements established by the Federal Safe

Drinking Water Act.

R309-105-6. Construction of Public Drinking Water Facilities.

The following requirements pertain to the construction of public water systems.

(1) Approval of Engineering Plans and Specifications

(a) Complete plans and specifications for all public drinking water projects, as described in R309-500-5, shall be approved in writing by the Director prior to the commencement of construction. A 30-day review time should be assumed.

(b) Appropriate engineering reports, supporting information and master plans may also be required by the Director as needed to evaluate the proposed project. A certificate of convenience and necessity or an exemption therefrom, issued by the Public Service Commission, shall be filed with the Director prior to approval of any plans or specifications for projects described in R309-500-4(1) as new or previously un-reviewed water system.

(2) Acceptable Design and Construction Methods

(a) The design and construction methods of all public drinking water facilities shall conform to the applicable standards contained in R309-500 through R309-550 of these rules. The Director may require modifications to plans and specifications before approval is granted.

(b) There may be times in which the requirements of the applicable standards contained in R309-500 through R309-550 are not appropriate. Thus, the Director may grant an "exception" to portions of these standards if it can be shown that the granting of such an exception will not jeopardize the public health. In order for the Director to consider such a request, the public drinking water system shall submit a written request directly from the management of the public drinking water system, preferably on system letterhead, that includes the following:

(i) citation of the specific rule for which the "exception" is being requested;

(ii) a detailed explanation, drawings may be included, of why the conditions of rule cannot be met;

(iii) what the system proposes, drawings may be included, in lieu of rule;

(iv) justification the proposed alternative will protect the public health to a similar or better degree than required by rule.

Physical conditions as well as cost may be justification for requesting an "exception-to-rule."

(c) Alternative or new treatment techniques may be developed which are not specifically addressed by the applicable standards contained in R309-500 through R309-550. These treatment techniques may be accepted by the Director if it can be shown that:

(i) They will result in a finished water meeting the requirements of R309-200 of these regulations.

(ii) The technique will produce finished water which will protect public health to the same extent provided by comparable treatment processes outlined in the applicable standards contained in R309-500 through R309-550.

(iii) The technique is as reliable as any comparable treatment process governed by the applicable standards contained in R309-500 through R309-550.

(3) Description of "Public Drinking Water Project"

Refer to R309-500-5 for the description of a public drinking water project and R309-500-6 for required items to be submitted for plan approval.

(4) Specifications for the drilling of a public water supply well may be prepared and submitted by a licensed well driller holding a current Utah Well Driller's Permit if authorized by the Director.

(5) Drawing Quality and Size

Drawings which are submitted shall be compatible with Division of Drinking Water Document storage. Drawings which are illegible or of unusual size will not be accepted for review. Drawing size shall not exceed 30" x 42" nor be less than 8-1/2" x 11".

(6) Requirements After Approval of Plans for Construction

After the approval of plans for construction, and prior to operation of any facilities dealing with drinking water, the items required by R309-500-9 shall be submitted and an operating permit received.

R309-105-7. Source Protection.

(1) Public Water Systems are responsible for protecting their sources of drinking water from contamination. R309-600 and R309-605 sets forth minimum requirements to establish a uniform, statewide program for implementation by PWSs to protect their sources of drinking water. PWSs are encouraged to enact more stringent programs to protect their sources of drinking water if they decide they are necessary.

(2) R309-600 applies to ground-water sources and to ground-water sources which are under the direct influence of surface water which are used by PWSs to supply their systems with drinking water.

(3) R309-605 applies to PWSs which obtain surface water prior to treatment and distribution and to PWSs obtaining water from ground-water sources which are under the direct influence of surface water. However, compliance with this rule is voluntary for public transient non-community water systems to the extent that they are using existing surface water sources of drinking water.

R309-105-8. Existing Water System Facilities.

(1) All public water systems shall deliver water meeting the applicable requirements of R309-200 of these rules.

(2) Existing facilities shall be brought into compliance with R309-500 through R309-550 or shall be reliably capable of delivering water meeting the requirements of R309-200.

(3) In situations where a water system is providing water of unsatisfactory quality, or when the quality of the water or the public health is threatened by poor physical facilities, the water system management shall solve the problem(s).

R309-105-9. Minimum Water Pressure.

(1) Unless otherwise specifically approved by the Director, no water supplier shall allow any connection to the water system where the dynamic water pressure at the point of connection will fall below 20 psi during the normal operation of the water system. Water systems approved prior to January 1, 2007, are required to maintain the above minimum dynamic water pressure at all locations within their distribution system. Existing public drinking water systems, approved prior to January 1, 2007, which expand their service into new areas or supply new subdivisions shall meet the minimum dynamic water pressure requirements in R309-105-9(2) at any point of connection in the new service areas or new subdivisions.

(2) Unless otherwise specifically approved by the Director, new public drinking water systems constructed after January 1, 2007 shall be designed and shall meet the following minimum water pressures at points of connection:

(a) 20 psi during conditions of fire flow and fire demand experienced during peak day demand;

(b) 30 psi during peak instantaneous demand; and

(c) 40 psi during peak day demand.

(3) Individual home booster pumps are not allowed as indicated in R309-540-5(4)(c).

R309-105-10. Operation and Maintenance Procedures.

All routine operation and maintenance of public water supplies shall be carried out with due regard for public health and safety. The following sections describe procedures which shall be used in carrying out some common operation and maintenance procedures.

(1) Chemical Addition

(a) Water system operators shall determine that all chemicals added to water intended for human consumption are suitable for potable water use and comply with ANSI/NSF Standard 60.

(b) No chemicals or other substances shall be added to public water supplies unless the chemical addition facilities and chemical type have been reviewed and approved by the Director.

(c) Chlorine, when used in the distribution system, shall be added in sufficient quantity to achieve either "breakpoint" and yield a detectable free chlorine residual or a detectable combined chlorine residual in the distribution system at points to be determined by the Director. Residual checks shall be taken a minimum of three times each week by the operator of any system using disinfectants. The Director may, however, reduce the frequency of residual checks if he determines that this would be an unwarranted hardship on the water system operator and, furthermore, the disinfection equipment has a verified record of reliable operation. Suppliers, when checking for residuals, shall use test kits and methods which meet the requirements of the U.S. EPA. The "DPD" test method is recommended for free chlorine residuals. Information on the suppliers of this equipment is available from the Division of Drinking Water.

(2) New and Repaired Mains

(a) All new water mains shall meet the requirements of R309-550-6 with regard to materials of construction. All products in contact with culinary water shall comply with ANSI/NSF Standard 61.

(b) All new and repaired water mains or appurtenances shall be disinfected in accordance with AWWA Standard C651-92. The chlorine solution shall be flushed from the water main with potable water prior to the main being placed in use.

(c) All products used to recoat the interiors of storage structures and which may come in contact with culinary water shall comply with ANSI/NSF Standard 61.

(3) Reservoir Maintenance and Disinfection

After a reservoir has been entered for maintenance or re-coating, it shall be disinfected prior to being placed into service. Procedures given in AWWA Standard C651-92 shall be followed in this regard.

(4) Spring Collection Area Maintenance

(a) Spring collection areas shall be periodically cleared of deep rooted vegetation to prevent root growth from clogging collection lines. Frequent hand or mechanical clearing of spring collection areas is strongly recommended. It is advantageous to encourage the growth of grasses and other shallow rooted vegetation for erosion control and to inhibit the growth of more detrimental flora.

(b) No pesticide (e.g., herbicide) may be applied on a spring collection area without the prior written approval of the Director. Such approval shall be given 1) only when acceptable pesticides are proposed; 2) when the pesticide product manufacturer certifies that no harmful substance will be imparted to the water; and 3) only when spring development meets the requirements of these rules (see R309-515-7).

(5) Security

All water system facilities such as spring junction boxes, well houses, reservoirs, and treatment facilities shall be secure.

(6) Seasonal Operation

Water systems operated seasonally shall be disinfected and flushed according to the techniques given in AWWA Standard C651-92 and C652-92 prior to each season's use. A satisfactory bacteriologic sample shall be achieved prior to use. During the non-use period, care shall be taken to close all openings into the system.

(7) Pump Lubricants

All oil lubricated pumps for culinary wells shall utilize mineral oils suitable for human consumption as determined by the Director. To assure proper performance, and to prevent the voiding of any warranties which may be in force, the water supplier should confirm with individual pump manufacturers that the oil which is selected will have the necessary properties to perform satisfactorily.

R309-105-11. Operator Certification.

All community and non-transient non-community water systems or any public system that employs treatment techniques for surface water or ground water under the direct influence of surface water shall have an appropriately certified operator in accordance with the requirements of these rules. Refer to R309-300, Certification Rules for Water Supply Operators, for specific requirements.

R309-105-12. Cross Connection Control.

(1) The water supplier shall not allow a connection to his system which may jeopardize its quality and integrity. Cross connections are not allowed unless controlled by an approved and properly operating backflow prevention assembly. The requirements of Chapter 6 of the 2009 International Plumbing Code and its amendments as adopted by the Department of Commerce under R156-56 shall be met with respect to cross connection control and backflow prevention.

(2) Each water system shall have a functioning cross connection control program. The program shall consist of five designated elements documented on an annual basis. The elements are:

- (a) a legally adopted and functional local authority to enforce a cross connection control program (i.e., ordinance, bylaw or policy);
- (b) providing public education or awareness material or presentations;
- (c) an operator with adequate training in the area of cross connection control or backflow prevention;
- (d) written records of cross connection control activities, such as, backflow assembly inventory; and
- (e) test history and documentation of on-going enforcement (hazard assessments and enforcement actions) activities.

(3) Suppliers shall maintain, as proper documentation, an inventory of each pressure atmospheric vacuum breaker, double check valve, reduced pressure zone principle assembly, and high hazard air gap used by their customers, and a service record for each such assembly.

(4) Backflow prevention assemblies shall be in-line serviceable (repairable), in-line testable and have certification through third party certifying agencies to be used within a public drinking water system. Third party certification shall consist of any combination of two certifications, laboratory or field, performed by a recognized testing organization which has demonstrated competency to perform such tests.

(5) Backflow prevention assemblies shall be inspected and tested at least once a year, by an individual certified for such work as specified in R309-305. Suppliers shall maintain, as proper documentation, records of these inspections. This testing responsibility may be borne by the water system or the water system management may require

that the customer having the backflow prevention assembly be responsible for having the device tested.

(6) Suppliers serving areas also served by a pressurized irrigation system shall prevent cross connections between the two. Requirements for pressurized irrigation systems are outlined in Section 19-4-112 of the Utah Code.

R309-105-13. Finished Water Quality.

All public water systems are required to monitor their water according to the requirements of R309-205, R309-210 and R309-215 to determine if the water quality standards of R309-200 have been met. Water systems are also required to keep records and, under certain circumstances, give public notice as required in R309-220.

R309-105-14. Operational Reports.**(1) Written Operational Reports.**

(a) If, in the opinion of the Director, a water system is not properly operated, the Director may require a public water system to submit a written operational report covering the operation of the whole or a part of the water system's infrastructure.

(b) The Director may require revisions to the submitted operational report to ensure satisfactory operation, and may order the water system to follow the operational report.

(c) If the water system fails to implement the provisions of the operational report, as evidenced by unsatisfactory delivery of a safe and/or reliable supply of drinking water, the Director may order further remedies as deemed necessary.

(2) Treatment techniques for acrylamide and epichlorohydrin.

(a) Each public water system shall certify annually in writing to the Director (using third party or manufacturer's certification) that when acrylamide and epichlorohydrin are used in drinking water systems, the combination (or product) of dose and monomer level does not exceed the levels specified in R309-215-8(2)(c).

(b) Certifications may rely on manufacturer's data.

(3)(a) All water systems using chemical addition or specialized equipment for the treatment of drinking water shall regularly complete operational reports. This information shall be evaluated to confirm that the treatment process is being done properly, resulting in successful treatment.

(b) The information to be provided, and the frequency at which it is to be gathered and reported, will be determined by the Director.

R309-105-15. Annual Reports.

All community water systems shall be required to complete annual report forms furnished by the Division of Drinking Water. The information to be provided shall include: the status of all water system projects started during the previous year; water demands met by the system; problems experienced; and anticipated projects.

R309-105-16. Reporting Test Results.

(1) If analyses are made by certified laboratories other than the state laboratory, these results shall be forwarded to the Division as follows:

(a) The supplier shall report to the Division the analysis of water samples which fail to comply with the Primary Drinking Water Standards of R309-200. Except where a different reporting period is specified in R309-205, R309-210 or R309-215, this report shall be submitted within 48 hours after the supplier receives the report from his lab. The Division may be reached at (801)536-4200.

(b) Monthly summaries of bacteriologic results shall be submitted within ten days following the end of each month.

(c) All results of TTHM samples shall be reported to the

Division within 10 days of receipt of analysis for systems monitoring pursuant to R309-210-9.

(d) For all samples other than samples showing unacceptable results, bacteriologic samples or TTHM samples, the time between the receipt of the analysis and the reporting of the results to the Division shall not exceed 40 days.

(e) Arsenic sampling results shall be reported to the nearest 0.001 mg/L.

(f) There are additional reporting requirements in other sections of the rules, see R309-215-16(5).

(2) Disinfection byproducts, maximum residual disinfectant levels and disinfection byproduct precursors and enhanced coagulation or enhanced softening. This section applies to the reporting requirements of R309-210-8, R309-215-12 and R309-215-13. For the reporting requirements of R309-210-9, R309-210-10 and R309-215-15 are contained within R309-210-9, R309-210-10 and R309-215-15, respectively.

(a) Systems required to sample quarterly or more frequently shall report to the State within 10 days after the end of each quarter in which samples were collected. Systems required to sample less frequently than quarterly shall report to the State within 10 days after the end of each monitoring period in which samples were collected. The Director may choose to perform calculations and determine whether the MCL was exceeded, in lieu of having the system report that information.

(b) Disinfection byproducts. Systems shall report the information specified.

(i) Systems monitoring for TTHMs and HAA5 under the requirements of R309-210-8(2) on a quarterly or more frequent basis shall report:

(A) The number of samples taken during the last quarter.

(B) The location, date, and result of each sample taken during the last quarter.

(C) The arithmetic average of all samples taken in the last quarter.

(D) The annual arithmetic average of the quarterly arithmetic averages of this section for the last four quarters.

(E) Whether, based on R309-210-8(6)(b)(i), the MCL was violated.

(ii) Systems monitoring for TTHMs and HAA5 under the requirements of R309-210-8(2) less frequently than quarterly (but at least annually) shall report:

(A) The number of samples taken during the last year.

(B) The location, date, and result of each sample taken during the last monitoring period.

(C) The arithmetic average of all samples taken over the last year.

(D) Whether, based on R309-210-8(6)(b)(i), the MCL was violated.

(iii) Systems monitoring for TTHMs and HAA5 under the requirements of R309-210-8(2) less frequently than annually shall report:

(A) The location, date, and result of the last sample taken.

(B) Whether, based on R309-210-8(6)(b)(i), the MCL was violated.

(iv) Systems monitoring for chlorite under the requirements of R309-210-8(2) shall report:

(A) The number of entry point samples taken each month for the last 3 months.

(B) The location, date, and result of each sample (both entry point and distribution system) taken during the last quarter.

(C) For each month in the reporting period, the arithmetic average of all samples taken in each three sample set taken in the distribution system.

(D) Whether, based on R309-210-8(6)(b)(ii), the MCL was violated.

(v) System monitoring for bromate under the requirements of R309-210-8(2) shall report:

(A) The number of samples taken during the last quarter.

(B) The location, date, and result of each sample taken during the last quarter.

(C) The arithmetic average of the monthly arithmetic averages of all samples taken in the last year.

(D) Whether, based on R309-210-8(6)(b)(iii), the MCL was violated.

(c) Disinfectants. Systems shall report the information specified to the Director within ten days after the end of each month the system serves water to the public, except as otherwise noted:

(i) Systems monitoring for chlorine or chloramines under the requirements of R309-210-8(3)(a) shall report and certify, by signing the report form provided by the Director, that all the information provided is accurate and correct and that any chemical introduced into the drinking water complies with ANSI/NSF Standard 60:

(A) The number of samples taken during each month of the last quarter.

(B) The monthly arithmetic average of all samples taken in each month for the last 12 months.

(C) The arithmetic average of all monthly averages for the last 12 months.

(D) The additional data required in R309-210-8(3)(a)(ii).

(E) Whether, based on R309-210-8(6)(c)(i), the MRDL was violated.

(ii) Systems monitoring for chlorine dioxide under the requirements of R309-210-8(3) shall report:

(A) The dates, results, and locations of samples taken during the last quarter.

(B) Whether, based on R309-210-8(6)(c)(ii), the MRDL was violated.

(C) Whether the MRDL was exceeded in any two consecutive daily samples and whether the resulting violation was acute or nonacute.

(d) Disinfection byproduct precursors and enhanced coagulation or enhanced softening. Systems shall report the information specified.

(i) Systems monitoring monthly or quarterly for TOC under the requirements of R309-215-12 and required to meet the enhanced coagulation or enhanced softening requirements in R309-215-13(2)(b) or (c) shall report:

(A) The number of paired (source water and treated water) samples taken during the last quarter.

(B) The location, date, and results of each paired sample and associated alkalinity taken during the last quarter.

(C) For each month in the reporting period that paired samples were taken, the arithmetic average of the percent reduction of TOC for each paired sample and the required TOC percent removal.

(D) Calculations for determining compliance with the TOC percent removal requirements, as provided in R309-215-13(3)(a).

(E) Whether the system is in compliance with the enhanced coagulation or enhanced softening percent removal requirements in R309-215-13(2) for the last four quarters.

(ii) Systems monitoring monthly or quarterly for TOC under the requirements of R309-215-12 and meeting one or more of the alternative compliance criteria in R309-215-13(1)(b) or (c) shall report:

(A) The alternative compliance criterion that the system is using.

(B) The number of paired samples taken during the last

quarter.

(C) The location, date, and result of each paired sample and associated alkalinity taken during the last quarter.

(D) The running annual arithmetic average based on monthly averages (or quarterly samples) of source water TOC for systems meeting a criterion in R309-215-13(1)(b)(i) or (iii) or of treated water TOC for systems meeting the criterion in R309-215-13(1)(b)(ii).

(E) The running annual arithmetic average based on monthly averages (or quarterly samples) of source water SUVA for systems meeting the criterion in R309-215-13(1)(b)(v) or of treated water SUVA for systems meeting the criterion in R309-215-13(1)(b)(vi).

(F) The running annual average of source water alkalinity for systems meeting the criterion in R309-215-13(1)(b)(iii) and of treated water alkalinity for systems meeting the criterion in R309-215-13(1)(c)(i).

(G) The running annual average for both TTHM and HAA5 for systems meeting the criterion in R309-215-13(1)(b)(iii) or (iv).

(H) The running annual average of the amount of magnesium hardness removal (as CaCO_3 , in mg/L) for systems meeting the criterion in R309-215-13(1)(c)(ii).

(I) Whether the system is in compliance with the particular alternative compliance criterion in R309-215-13(1)(b) or (c).

(3) The public water system, within 10 days of completing the public notification requirements under R309-220 for the initial public notice and any repeat notices, shall submit to the Division a certification that it has fully complied with the public notification regulations. The public water system shall include with this certification a representative copy of each type of notice distributed, published, posted, and made available to the persons served by the system and to the media.

(4) All samples taken in accordance with R309-215-6 shall be submitted within 10 days following the end of the operational period specified for that particular treatment. Finished water samples results for the contaminant of concern that exceed the Primary Drinking Water Standards of R309-200, shall be reported to the Division within 48 hours after the supplier receives the report. The Division may be reached at (801) 536-4000.

(5) Documentation of operation and maintenance for point-of-use or point-of-entry treatment units shall be provided to the Division annually. The Division shall receive the documentation by January 31 annually.

R309-105-17. Record Maintenance.

All public water systems shall retain on their premises or at convenient location near their premises the following records:

(1) Records of microbiological analyses and turbidity analyses made pursuant to this Section shall be kept for not less than five years. Records of chemical analyses made pursuant to this Section shall be kept for not less than ten years. Actual laboratory reports may be kept, or data may be transferred to tabular summaries, provided that the following information is included:

(a) The date, place and time of sampling, and the name of the person who collected the sample;

(b) Identification of the sample as to whether it was a routine distribution system sample, check sample, raw or process water sample or other special purpose sample.

(c) Date of analysis;

(d) Laboratory and person responsible for performing analysis;

(e) The analytical technique/method used; and

(f) The results of the analysis.

(2) Lead and copper recordkeeping requirements.

(a) Any water system subject to the requirements of R309-210-6 shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, Director determinations, and any other information required by R309-210-6.

(b) Each water system shall retain the records required by this section for no fewer than 12 years.

(3) Records of action taken by the system to correct violations of primary drinking water regulations shall be kept for a period not less than three years after the last action taken with respect to the particular violation involved.

(4) Copies of any written reports, summaries or communications relating to sanitary surveys of the system conducted by the system itself, by a private consultant, or by any local, State or Federal agency, shall be kept for a period not less than ten years after completion of the sanitary survey involved.

(5) Records concerning a variance or exemption granted to the system shall be kept for a period ending not less than five years following the expiration of such variance or exemption.

(6) Records that concern the tests of a backflow prevention assembly and location shall be kept by the system for a minimum of not less than five years from the date of the test.

(7) Copies of public notices issued pursuant to R309-220 and certifications made to the Director pursuant to R309-105-16 shall be kept for three years after issuance.

(8) Copies of monitoring plans developed pursuant to these rules shall be kept for the same period of time as the records of analyses taken under the plan are required to be kept under R309-105-17(1), except as otherwise specified. In all cases the monitoring plans shall be kept as long as the any associated report.

(9) A water system must retain a complete copy of your IDSE report submitted under this section for 10 years after the date that you submitted your IDSE report. If the Director modifies the R309-210-10 monitoring requirements that you recommended in your IDSE report or if the Director approves alternative monitoring locations, you must keep a copy of the Director's notification on file for 10 years after the date of the Director's notification. You must make the IDSE report and any Director notification available for review by the Director or the public.

(10) A water system must retain a complete copy of its 40/30 certification submitted under this R309-210-9 for 10 years after the date that you submitted your certification. You must make the certification, all data upon which the certification is based, and any Director notification available for review by the Director or the public.

(11) A water subject to the disinfection profiling requirements of R309-215-14 shall keep must keep results of profile (raw data and analysis) indefinitely.

(12) A water system subject to the disinfection benchmarking requirements of R309-215-14 shall keep must keep results of profile (raw data and analysis) indefinitely.

R309-105-18. Emergencies.

(1) The Director or the local health department shall be informed by telephone by a water supplier of any "emergency situation". The term "emergency situation" includes the following:

(a) The malfunction of any disinfection facility such that a detectable residual cannot be maintained at all points in the distribution system.

(b) The malfunction of any "complete" treatment plant such that a clearwell effluent turbidity greater than 5 NTU is maintained longer than fifteen minutes.

(c) Muddy or discolored water (which cannot be explained by air entrainment or re-suspension of sediments normally deposited within the distribution system) is experienced by a significant number of individuals on a system.

(d) An accident has occurred which has, or could have, permitted the entry of untreated surface water and/or other contamination into the system (e.g. break in an unpressurized transmission line, flooded spring area, chemical spill, etc.)

(e) A threat of sabotage has been received by the water supplier or there is evidence of vandalism or sabotage to any public drinking water supply facility which may affect the quality of the delivered water.

(f) Any instance where a consumer reports becoming sick by drinking from a public water supply and the illness is substantiated by a doctor's diagnosis (unsubstantiated claims should also be reported to the Division of Drinking Water, but this is not required).

(2) If an emergency situation exists, the water supplier shall then contact the Division in Salt Lake City within eight hours. Division personnel may be reached at all times through 801-536-4123.

(3) All suppliers are advised to develop contingency plans to cope with possible emergency situations. In many areas of the state the possibility of earthquake damage shall be realistically considered.

KEY: drinking water, watershed management

October 12, 2013

19-4-104

Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.**R309-110. Administration: Definitions.****R309-110-1. Purpose.**

The purpose of this rule is to define certain terms and expressions that are utilized throughout all rules under R309. Collectively, those rules govern the administration, monitoring, operation and maintenance of public drinking water systems as well as the design and construction of facilities within said systems.

R309-110-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-110-3. Acronyms.

As used in R309:

"AF" means Acre Foot.
 "AWOP" means Area Wide Optimization Program.
 "AWWA" means American Water Works Association.
 "BAT" means Best Available Technology.
 "C" means Residual Disinfectant Concentration.
 "CCP" means Composite Correction Program.
 "CCR" means Consumer Confidence Report.
 "CEU" means Continuing Education Unit.
 "CFE" means Combined Filter Effluent.
 "CFR" means Code of Federal Regulations.
 "cfs" means Cubic Feet Per Second.
 "CPE" means Comprehensive Performance Evaluation.
 "CT" means Residual Concentration multiplied by Contact Time.
 "CTA" means Comprehensive Technical Assistance.
 "CWS" means Community Water System.
 "DBPs" means Disinfection Byproducts.
 "DE" means Diatomaceous Earth.
 "DTF" means Data Transfer Format.
 "DWSP" means Drinking Water Source Protection.
 "EP" means Entry Point.
 "EPA" means Environmental Protection Agency.
 "ERC" means Equivalent Residential Connection.
 "FBRR" means Filter Backwash Recycling Rule.
 "fps" means Feet Per Second.
 "FR" means Federal Register.
 "gpd" means Gallons Per Day.
 "gpm" means Gallons Per Minute.
 "gpm/sf" means Gallons Per Minute Per Square Foot.
 "GWR" means Ground Water Rule.
 "GWUDI" means Ground Water Under Direct Influence of Surface Water.
 "HAA5s" means Haloacetic Acids (Five).
 "HPC" means Heterotrophic Plate Count.
 "ICR" means Information Collection Rule of 40 CRF 141 subpart M.
 "IESWTR" means Interim Enhanced Surface Water Treatment Rule.
 "IFE" means Individual Filter Effluent.
 "LT1ESWTR" means Long Term 1 Enhanced Surface Water Treatment Rule.
 "LT2ESWTR" means Long Term 2 Enhanced Surface Water Treatment Rule.
 "MCL" means Maximum Contaminant Level.
 "MCLG" means Maximum Contaminant Level Goal.
 "M and R" means Monitoring and Reporting.
 "MDBP" means Microbial-Disinfection Byproducts.
 "M/DBP Cluster" means Microbial-Disinfectants/Disinfection Byproducts Cluster.
 "MG" means Million Gallons.

"MGD" means Million Gallons Per Day.

"mg/L" means Milligrams Per Liter

"MRDL" means Maximum Residual Disinfectant Level.

"MRDLG" means Maximum Residual Disinfectant Level

Goal.

"NCWS" means Non-Community Water System.

"NTNC" means Non-Transient Non-Community.

"NTU" means Nephelometric Turbidity Unit.

"PN" means Public Notification.

"POE" means Point-of-Entry.

"POU" means Point-of-Use.

"PWS" means Public Water System.

"PWS-ID" means Public Water System Identification

Number.

"RTC" means Return to Compliance.

"SDWA" means Safe Drinking Water Act.

"SDWIS/FED" means Safe Drinking Water Information

System/Federal Version.

"SDWIS/STATE" means Safe Drinking Water

Information System/State Version.

"SNC" means Significant Non-Compliance.

"Stage 1 DBPR" means Stage 1 Disinfectants and Disinfection Byproducts Rule.

"Stage 2 DBPR" means Stage 2 Disinfectants and Disinfection Byproducts Rule.

"Subpart H" means A PWS using SW or GWUDI.

"Subpart P" means A PWS using SW or GWUDI and serving at least 10,000 people.

"Subpart S" means Provisions of 40 CRF 141 subpart S commonly referred to as the Information Collection Rule.

"Subpart T" means A PWS using SW or GWUDI and serving less than 10,000 people.

"SUVA" means Specific Ultraviolet Absorption.

"SW" means Surface Water.

"SWAP" means Source Water Assessment Program.

"SWTR" means Surface Water Treatment Rule.

"T" means Contact Time.

"TA" means Technical Assistance.

"TCR" means Total Coliform Rule.

"TNCWS" means Transient Non-Community Water System.

"TNTC" means Too Numerous To Count.

"TOC" means Total Organic Carbon.

"TT" means Treatment Technique.

"TTHM" means Total Trihalomethanes.

"UAC" means Utah Administrative Code.

"UPDWR" means Utah Public Drinking Water Rules (R309 of the UAC).

"WCP" means Watershed Control Program.

"WHP" means Wellhead Protection.

R309-110-4. Definitions.

As used in R309:

"Action Level" means the concentration of lead or copper in drinking water tap samples (0.015 mg/l for lead and 1.3 mg/l for copper) which determines, in some cases, the corrosion treatment, public education and lead line replacement requirements that a water system is required to complete.

"AF" means acre foot and is the volume of water required to cover an acre to a depth of one foot (one AF is equivalent to 325,851 gallons).

"Air gap" The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, catch basin, plumbing fixture or other device and the flood level rim of the receptacle. This distance shall be two times the diameter of the effective opening for openings greater than one inch in diameter where walls or obstructions are spaced from the

nearest inside edge of the pipe opening a distance greater than three times the diameter of the effective openings for a single wall, or a distance greater than four times the diameter of the effective opening for two intersecting walls. This distance shall be three times the diameter of the effective opening where walls or obstructions are closer than the distances indicated above.

"ANSI/NSF" refers to the American National Standards Institute and NSF International. NSF International has prepared at least two health effect standards dealing with treatment chemicals added to drinking water and system components that will come into contact with drinking water, these being Standard 60 and Standard 61. The American National Standards Institute acts as a certifying agency, and determines which laboratories may certify to these standards.

"Approval" unless indicated otherwise, shall be taken to mean a written statement of acceptance from the Director.

"Approved" refers to a rating placed on a system by the Division and means that the public water system is operating in substantial compliance with all the Rules of R309.

"Average Yearly Demand" means the amount of water delivered to consumers by a public water system during a typical year, generally expressed in MG or AF.

"AWWA" refers to the American Water Works Association located at 6666 West Quincy Avenue, Denver, Colorado 80235. Reference within these rules is generally to a particular Standard prepared by AWWA and which has completed the ANSI approval process such as ANSI/AWWA Standard C651-92 (AWWA Standard for Disinfecting Water Mains).

"Backflow" means the undesirable reversal of flow of water or mixtures of water and other liquids, gases, or other substances into the distribution pipes of the potable water supply from any source. Also see backsiphonage, backpressure and cross-connection.

"Backpressure" means the phenomena that occurs when the customer's pressure is higher than the supply pressure. This could be caused by an unprotected cross connection between a drinking water supply and a pressurized irrigation system, a boiler, a pressurized industrial process, elevation differences, air or steam pressure, use of booster pumps or any other source of pressure. Also see backflow, backsiphonage and cross connection.

"Backsiphonage" means a form of backflow due to a reduction in system pressure which causes a subatmospheric or negative pressure to exist at a site or point in the water system. Also see backflow and cross-connection.

"Bag Filters" are pressure-driven separation devices that remove particle matter larger than 1 micrometer using an engineered porous filtration media. They are typically constructed of a non-rigid, fabric filtration media housed in a pressure vessel in which the direction of flow is from the inside of the bag to outside.

"Bank Filtration" is a water treatment process that uses a well to recover surface water that has naturally infiltrated into ground water through a river bed or bank(s). Infiltration is typically enhanced by the hydraulic gradient imposed by a nearby pumping water supply or other well(s).

"Best Available Technology" (BAT) means the best technology, treatment techniques, or other means which the Director finds, after examination under field conditions and not solely under laboratory conditions, are available (taking cost into consideration). For the purposes of setting MCLs for synthetic organic chemicals, any BAT must be at least as effective as granular activated carbon for all these chemicals except vinyl chloride. Central treatment using packed tower aeration is also identified as BAT for synthetic organic chemicals.

"Board" means the Drinking Water Board.

"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 for the State.

"Breakpoint Chlorination" means addition of chlorine to water until the chlorine demand has been satisfied. At this point, further addition of chlorine will result in a free residual chlorine that is directly proportional to the amount of chlorine added beyond the breakpoint.

"C" is short for "Residual Disinfectant Concentration."

"Capacity Development" means technical, managerial, and financial capabilities of the water system to plan for, achieve, and maintain compliance with applicable drinking water standards.

"Cartridge filters" are pressure-driven separation devices that remove particulate matter larger than 1 micrometer using an engineered porous filtration media. They are typically constructed as rigid or semi-rigid, self-supporting filter elements housed in pressure vessels in which flow is from the outside of the cartridge to the inside.

"cfs" means cubic feet per second and is one way of expressing flowrate (one cfs is equivalent to 448.8 gpm).

"Class" means the level of certification of Backflow Prevention Technician (Class I, II or III).

"Coagulation" is the process of destabilization of the charge (predominantly negative) on particulates and colloids suspended in water. Destabilization lessens the repelling character of particulates and colloids and allows them to become attached to other particles so that they may be removed in subsequent processes. The particulates in raw waters (which contribute to color and turbidity) are mainly clays, silt, viruses, bacteria, fulvic and humic acids, minerals (including asbestos, silicates, silica, and radioactive particles), and organic particulate.

"Collection area" means the area surrounding a ground-water source which is underlain by collection pipes, tile, tunnels, infiltration boxes, or other ground-water collection devices.

"Combined distribution system" is the interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water.

"Commission" means the Operator Certification Commission.

"Community Water System" (CWS) means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

"Compliance cycle" means the nine-year calendar year cycle during which public water systems must monitor. Each compliance cycle consists of three three-year compliance periods. The first calendar year cycle began January 1, 1993 and ends December 31, 2001; the second begins January 1, 2002 and ends December 31, 2010; the third begins January 1, 2011 and ends December 31, 2019.

"Compliance period" means a three-year calendar year period within a compliance cycle. Each compliance cycle has three three-year compliance periods. Within the first compliance cycle, the first compliance period ran from January 1, 1993 to December 31, 1995; the second from January 1, 1996 to December 31, 1998; and the third is from January 1, 1999 to December 31, 2001.

"Comprehensive Performance Evaluation" (CPE) is a thorough review and analysis of a treatment plant's performance-based capabilities and associated administrative, operation and maintenance practices. It is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance and emphasizes approaches that can be implemented without significant capital

improvements. For purposes of compliance with these rules, the comprehensive performance evaluation must consist of at least the following components: Assessment of plant performance; evaluation of major unit processes; identification and prioritization of performance limiting factors; assessment of the applicability of comprehensive technical assistance; and preparation of a CPE report.

"Confirmed SOC contamination area" means an area surrounding and including a plume of SOC contamination of the soil or water which previous monitoring results have confirmed. The area boundaries may be determined by measuring 3,000 feet horizontally from the outermost edges of the confirmed plume. The area includes deeper aquifers even though only the shallow aquifer is the one contaminated.

"Confluent growth" means a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion of the filtration area in which discrete bacterial colonies can not be distinguished.

"Consecutive system" is a public water system that receives some or all of its finished water from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system or one or more consecutive systems.

"Contaminant" means any physical, chemical biological, or radiological substance or matter in water.

"Continuing Education Unit" (CEU) means ten contact hours of participation in, and successful completion of, an organized and approved continuing education experience under responsible sponsorship, capable direction, and qualified instruction. College credit in approved courses may be substituted for CEUs on an equivalency basis.

"Conventional Surface Water Treatment" means a series of processes including coagulation, flocculation, sedimentation, filtration and disinfection resulting in substantial particulate removal and inactivation of pathogens.

"Controls" means any codes, ordinances, rules, and regulations that a public water system can cite as currently in effect to regulate potential contamination sources; any physical conditions which may prevent contaminants from migrating off of a site and into surface or ground water; and any site with negligible quantities of contaminants.

"Corrective Action" refers to a rating placed on a system by the Division and means a provisional rating for a public water system not in compliance with the Rules of R309, but making all the necessary changes outlined by the Director to bring them into compliance.

"Corrosion inhibitor" means a substance capable of reducing the corrosiveness of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

"Credit Enhancement Agreement" means any agreement entered into between the Board, on behalf of the State, and an eligible water system for the purpose of providing methods and assistance to eligible water systems to improve the security for and marketability of drinking water project obligations.

"Criteria" means the conceptual standards that form the basis for DWSP area delineation to include distance, ground-water time of travel, aquifer boundaries, and ground-water divides.

"Criteria threshold" means a value or set of values selected to represent the limits above or below which a given criterion will cease to provide the desired degree of protection.

"Cross-Connection" means any actual or potential connection between a drinking (potable) water system and any other source or system through which it is possible to introduce into the public drinking water system any used water, industrial fluid, gas or substance other than the

intended potable water. For example, if you have a pump moving non-potable water and hook into the drinking water system to supply water for the pump seal, a cross-connection or mixing may lead to contamination of the drinking water. Also see backsiphonage, backpressure and backflow.

"Cross Connection Control Program" means the program administered by the public water system in which cross connections are either eliminated or controlled.

"Cross Connection Control Commission" means the duly constituted advisory subcommittee appointed by the Board to advise the Board on Backflow Technician Certification and the Cross Connection Control Program of Utah.

"CT" or "CT_{calc}" is the product of "residual disinfectant concentration" (C) in mg/l determined before or at the first customer, and the corresponding "disinfectant contact time" (T) in minutes, i.e., "C" x "T." If a public water system applies disinfectant at more than one point prior to the first customer, the summation of each CT value for each disinfectant sequence before or at the first customer determines the total percent inactivation or "Total Inactivation Ratio." In determining the Total Inactivation Ratio, the public water system must determine the residual disinfectant concentration of each disinfection sequence and corresponding contact time before any subsequent disinfection application point(s).

"CT_{req'd}" is the CT value required when the log reduction credit given the filter is subtracted from the (3-log) inactivation requirement for *Giardia lamblia* or the (4-log) inactivation requirement for viruses.

"CT_{99.9}" is the CT value required for 99.9 percent (3-log) inactivation of *Giardia lamblia* cysts. CT_{99.9} for a variety of disinfectants and conditions appear in Tables 1.1-1.6, 2.1, and 3.1 of Section 141.74(b)(3) in the code of Federal Regulations (also available from the Division).

"Designated person" means the person appointed by a public water system to ensure that the requirements of their Drinking Water Source Protection Plan(s) for ground water sources and/or surface water sources are met.

"Desired Design Discharge Rate" means the discharge rate selected for the permanent pump installed in a public drinking water well source. This pumping rate is selected by the water system owner or engineer and can match or be the same rate utilized during the constant rate pump test required by R309-515 and R309-600 to determine delineated protection zones. For consideration of the number of permanent residential connections or ERC's that a well source can support (see Safe Yield) the Director will consider 2/3 of the test pumping rate as the safe yield.

"Detectable residual" means the minimum level of free chlorine in the water that the analysis method is capable of detecting and indicating positive confirmation.

"Direct Employment" means that the operator is directly compensated by the drinking water system to operate that drinking water system.

"Direct Filtration" means a series of processes including coagulation and filtration, but excluding sedimentation, resulting in substantial particulate removal.

"Direct Responsible Charge" means active on-site control and management of routine maintenance and operation duties. A person in direct responsible charge is generally an operator of a water treatment plant or distribution system who independently makes decisions during normal operation which can affect the sanitary quality, safety, and adequacy of water delivered to customers. In cases where only one operator is employed by the system, this operator shall be considered to be in direct responsible charge.

"Director" means the Director of the Division of Drinking Water.

"Disadvantaged Communities" are defined as those communities located in an area which has a median adjusted gross income which is less than or equal to 80% of the State's median adjusted gross income, as determined by the Utah State Tax commission from federal individual income tax returns excluding zero exemptions returns.

"Discipline" means type of certification (Distribution or Treatment).

"Disinfectant Contact Time" ("T" in CT calculations) means the time in minutes that it takes water to move from the point of disinfectant application or the previous point of disinfectant residual measurement to a point before or at the point where residual disinfectant concentration ("C") is measured. Where only one "C" is measured, "T" is the time in minutes that it takes water to move from the point of disinfectant application to a point before or at where residual disinfectant concentration ("C") is measured. Where more than one "C" is measured, "T" is (a) for the first measurement of "C," the time in minutes that it takes water to move from the first or only point of disinfectant application to a point before or at the point where the first "C" is measured and (b) for subsequent measurements of "C," the time in minutes that it takes for water to move from the previous "C" measurement point to the "C" measurement point for which the particular "T" is being calculated. Disinfectant contact time in pipelines must be calculated by dividing the internal volume of the pipe by the maximum hourly flow rate through that pipe. Disinfectant contact time within mixing basins and storage reservoirs must be determined by tracer studies or an equivalent demonstration.

"Disinfection" means a process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents (see also Primary Disinfection and Secondary Disinfection).

"Disinfection profile" is a summary of daily Giardia lamblia inactivation through the treatment plant.

"Distribution System" means the use of any spring or well source, distribution pipelines, appurtenances, and facilities which carry water for potable use to consumers through a public water supply. Systems which chlorinate groundwater are in this discipline.

"Distribution System Manager" means the individual responsible for all operations of a distribution system.

"Division" means the Utah Division of Drinking Water, who acts as staff to the Director and is also part of the Utah Department of Environmental Quality.

"Dose-monitoring Strategy" is the method by which a UV reactor maintains the required dose at or near some specified value by monitoring UV dose delivery. Such strategies must include, at a minimum, flow rate and UV intensity (measured via duty UV sensor) and lamp status. They sometimes include UVT and lamp power. Two common Dose-monitoring Strategies are the UV Intensity Setpoint Approach and the Calculated Dose Approach.

(1) The "UV Intensity Setpoint Approach" relies on one or more "setpoints" for UV intensity that are established during validation testing to determine UV dose. During operations, the UV intensity as measured by the UV sensors must meet or exceed the setpoint(s) to ensure delivery of the required dose. Reactors must also be operated within validated operation conditions for flow rates and lamp status. In the UV Intensity Setpoint Approach, UVT does not need to be monitored separately. Instead, the intensity readings by the sensors account for changes in UVT. The operating strategy can be with either a single setpoint (one UV intensity setpoint is used for all validated flow rates) or a variable setpoint (the UV intensity setpoint is determined using a lookup table or equation for a range of flow rates).

(2) The "Calculated Dose Approach" uses a dose-

monitoring equation to estimate the UV dose based on operating conditions (typically flow rate, UV intensity, and UVT). The dose-monitoring equation may be developed by the UV manufacturers using numerical methods; or the systems use an empirical dose-monitoring equation developed through validation testing. During reactor operations, the UV reactor control system inputs the measured parameters into the dose-monitoring equation to produce a calculated dose. The system operator divides the calculated dose by the Validation Factor (see the 2006 Final UV Guidance Manual Chapter 5 for more details on the Validation Factor) and compares the resulting value to the required dose for the target pathogen and log inactivation level.

"Dose Equivalent" means the product of the absorbed dose from ionizing radiation and such factors as account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission of Radiological Units and Measurements (ICRU).

"Drinking Water" means water that is fit for human consumption and meets the quality standards of R309-200. Common usage of terms such as culinary water, potable water or finished water are synonymous with drinking water.

"Drinking Water Project" means any work or facility necessary or desirable to provide water for human consumption and other domestic uses which has at least fifteen service connections or serves an average of twenty-five individuals daily for at least sixty days of the year and includes collection, treatment, storage, and distribution facilities under the control of the operator and used primarily with the system and collection, pretreatment or storage facilities used primarily in connection with the system but not under such control.

"Drinking Water Project Obligation" means any bond, note or other obligation issued to finance all or part of the cost of acquiring, constructing, expanding, upgrading or improving a drinking water project.

"Drinking Water Regional Planning" means a county wide water plan, administered locally by a coordinator, who facilitates the input of representatives of each public water system in the county with a selected consultant, to determine how each public water system will either collectively or individually comply with source protection, operator certification, monitoring (including consumer confidence reports), capacity development (including technical, financial and managerial aspects), environmental issues, available funding and related studies.

"Dual sample set" is a set of two samples collected at the same time and same location, with one sample analyzed for TTHM and the other sample analyzed for HAA5. Dual sample sets are collected for the purposes of conducting an IDSE under R309-210-9 and determining compliance with the TTHM and HAA5 MCLs under R309-210-10.

"Duty UV Sensors (or Duty Sensors)" are on-line sensors installed in the UV reactor and continuously monitor UV intensity during UV equipment operations.

"DWSP Program" means the program to protect drinking water source protection zones and management areas from contaminants that may have an adverse effect on the health of persons.

"DWSP Zone" means the surface and subsurface area surrounding a ground-water or surface water source of drinking water supplying a PWS, over which or through which contaminants are reasonably likely to move toward and reach such water source.

"Emergency Storage" means that storage tank volume which provides water during emergency situations, such as pipeline failures, major trunk main failures, equipment failures, electrical power outages, water treatment facility

failures, source water supply contamination, or natural disasters.

"Engineer" means a person licensed under the Professional Engineers and Land Surveyors Licensing Act, 58-22 of the Utah Code, as a "professional engineer" as defined therein.

"Enhanced coagulation" means the addition of sufficient coagulant for improved removal of disinfection byproduct precursors by conventional filtration treatment.

"Enhanced softening" means the improved removal of disinfection byproduct precursors by precipitative softening.

"Equalization Storage" means that storage tank volume which stores water during periods of low demand and releases the water under periods of high demand. Equalization storage provides a buffer between the sources and distribution for the varying daily water demands. Typically, water demands are high in the early morning or evening and relatively low in the middle of the night. A rule-of-thumb for equalization storage volume is that it should be equal to one average day's use.

"Equivalent Residential Connection" (ERC) is a term used to evaluate service connections to consumers other than the typical residential domicile. Public water system management is expected to review annual metered drinking water volumes delivered to non-residential connections and estimate the equivalent number of residential connections that these represent based upon the average of annual metered drinking water volumes delivered to true single family residential connections. This information is utilized in evaluation of the system's source and storage capacities (refer to R309-510).

"Existing ground-water source of drinking water" means a public supply ground-water source for which plans and specifications were submitted to the Division on or before July 26, 1993.

"Existing surface water source of drinking water" means a public supply surface water source for which plans and specifications were submitted to the Division on or before June 12, 2000.

"Filtration" means a process for removing particulate matter from water by passage through porous media.

"Filter profile" is a graphical representation of individual filter performance, based on continuous turbidity measurements or total particle counts versus time for an entire filter run, from startup to backwash inclusively, that includes an assessment of filter performance while another filter is being backwashed.

"Financial Assistance" means a drinking water project loan, credit enhancement agreement, interest buy-down agreement or hardship grant.

"Finished water" is water that is introduced into the distribution system of a public water system and is intended for distribution and consumption without further treatment, except as treatment necessary to maintain water quality in the distribution system (e.g., booster disinfection, addition of corrosion control chemicals).

"Fire Suppression Storage" means that storage tank volume allocated to fire suppression activities. It is generally determined by the requirements of the local fire marshal, expressed in gallons, and determined by the product of a minimum flowrate in gpm and required time expressed in minutes.

"First draw sample" means a one-liter sample of tap water, collected in accordance with an approved lead and copper sampling site plan, that has been standing in plumbing pipes at least 6 hours and is collected without flushing the tap.

"Flash Mix" is the physical process of blending or dispersing a chemical additive into an unblended stream. Flash Mixing is used where an additive needs to be dispersed rapidly (within a period of one to ten seconds). Common

usage of terms such as "rapid mix" or "initial mix" are synonymous with flash mix.

"Floc" means flocculated particles or agglomerated particles formed during the flocculation process. Flocculation enhances the agglomeration of destabilized particles and colloids toward settleable (or filterable) particles (flocs). Flocculated particles may be small (less than 0.1 mm diameter) micro flocs or large, visible flocs (0.1 to 3.0 mm diameter).

"Flocculation" means a process to enhance agglomeration of destabilized particles and colloids toward settleable (or filterable) particles (flocs). Flocculation begins immediately after destabilization in the zone of decaying mixing energy (downstream from the mixer) or as a result of the turbulence of transporting flow. Such incidental flocculation may be an adequate flocculation process in some instances. Normally flocculation involves an intentional and defined process of gentle stirring to enhance contact of destabilized particles and to build floc particles of optimum size, density, and strength to be subsequently removed by settling or filtration.

"Flowing stream" is a course of running water flowing in a definite channel.

"fps" means feet per second and is one way of expressing the velocity of water.

"G" is used to express the energy required for mixing and for flocculation. It is a term which is used to compare velocity gradients or the relative number of contacts per unit volume per second made by suspended particles during the flocculation process. Velocity gradients G may be calculated from the following equation: $G = \text{square root of the value}(550 \text{ times } P \text{ divided by } u \text{ times } V)$. Where: P = applied horsepower, u = viscosity, and V = effective volume.

"GAC10" means granular activated carbon filter beds with an empty-bed contact time of 10 minutes based on average daily flow and a carbon reactivation frequency of every 180 days, except that the reactivation frequency for GAC10 used as a best available technology for compliance with R309-210-10 MCLs under R309-200-5(3)(i)(A) shall be 120 days.

"GAC20" means granular activated carbon filter beds with an empty-bed contact time of 20 minutes based on average daily flow and a carbon reactivation frequency of every 240 days.

"Geologist" means a person licensed under the Professional Geologist Licensing Act, 58-76 of the Utah Code, as a "professional geologist" as defined therein.

"Geometric Mean" the geometric mean of a set of N numbers $X_1, X_2, X_3, \dots, X_N$ is the N th root of the product of the numbers.

"gpd" means gallons per day and is one way of expressing average daily water demands experienced by public water systems.

"gpm" means gallons per minute and is one way of expressing flowrate.

"gpm/sf" means gallons per minute per square foot and is one way of expressing flowrate through a surface area.

"Grade" means any one of four possible steps within a certification discipline of either water distribution or water treatment. Grade I indicates knowledge and experience requirements for the smallest type of public water supply. Grade IV indicates knowledge and experience levels appropriate for the largest, most complex type of public water supply.

"Gross Alpha Particle Activity" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

"Gross Beta Particle Activity" means the total radioactivity due to beta particle emission as inferred from

measurements on a dry sample.

"ground water of high quality" means a well or spring producing water deemed by the Director to be of sufficiently high quality that no treatment is required. Such sources shall have been designed and constructed in conformance with these rules, have been tested to establish that all applicable drinking water quality standards (as given in rule R309-200) are reliably and consistently met, have been deemed not vulnerable to natural or man-caused contamination, and the public water system management have established adequate protection zones and management policies in accordance with rule R309-600.

"ground water of low quality" means a well or spring which, as determined by the Director, cannot reliably and consistently meet the drinking water quality standards described in R309-200. Such sources shall be deemed to be a low quality ground water source if any of the conditions outlined in subsection R309-505-8(1) exist. Ground water that is classified "UDI" is a subset of this definition and requires "conventional surface water treatment" or an acceptable alternative.

"Ground Water Source" means any well, spring, tunnel, adit, or other underground opening from or through which ground water flows or is pumped from subsurface water-bearing formations.

"Ground Water Under the Direct Influence of Surface Water" or "UDI" or "GWUDI" means any water beneath the surface of the ground with significant occurrence of insects or other macro organisms, algae, or large-diameter pathogens such as *Giardia lamblia*, or *Cryptosporidium*, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions. Direct influence will be determined for individual sources in accordance with criteria established by the Director. The determination of direct influence may be based on site-specific measurements of water quality and/or documentation of well or spring construction and geology with field evaluation.

"Haloacetic acids"(five) (HAA5) mean the sum of the concentrations in mg/L of the haloacetic acid compounds (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid), rounded to two significant figures after addition.

"Hardship Grant" means a grant of monies to a political subdivision that meets the drinking water project loan considerations whose project is determined by the Board to not be economically feasible unless grant assistance is provided. A hardship grant may be authorized in the following forms:

(1) a Planning Advance which will be required to be repaid at a later date, to help meet project costs incident to planning to determine the economic, engineering and financial feasibility of a proposed project;

(2) a Design Advance which will be required to be repaid at a later date, to help meet project costs incident to design including, but not limited to, surveys, preparation of plans, working drawings, specifications, investigations and studies; or

(3) a Project Grant which will not be required to be repaid.

"Hardship Grant Assessment" means an assessment applied to loan recipients. The assessment shall be calculated as a percentage of principal. Hardship grant assessment funds shall be subject to the requirements of UAC R309-700 for hardship grants.

"Hotel, Motel or Resort" shall include tourist courts, motor hotels, resort camps, hostels, lodges, dormitories and similar facilities, and shall mean every building, or structure

with all buildings and facilities in connection, kept, used, maintained as, advertised as, or held out to the public to be, a place where living accommodations are furnished to transient guests or to groups normally occupying such facilities on a seasonal or short term basis.

"Hydrogeologic methods" means the techniques used to translate selected criteria and criteria thresholds into mappable delineation boundaries. These methods include, but are not limited to, arbitrary fixed radii, analytical calculations and models, hydrogeologic mapping, and numerical flow models.

"Inactivation" means, in the context of UV disinfection, a process by which a microorganism is rendered unable to reproduce, thereby rendering it unable to infect a host.

"Initial compliance period" means the first full three-year compliance period which begins at least 18 months after promulgation, except for contaminants listed in R309-200-5(3)(a), Table 200-2 numbers 19 to 33; R309-200-5(3)(b), Table 200-3 numbers 19 to 21; and R309-200-5(1)(c), Table 200-1 numbers 1, 5, 8, 11 and 18, initial compliance period means the first full three-year compliance after promulgation for systems with 150 or more service connections (January 1993-December 1995), and first full three-year compliance period after the effective date of the regulation (January 1996-December 1998) for systems having fewer than 150 service connections.

"Intake", for the purposes of surface water drinking water source protection, means the device used to divert surface water and also the conveyance to the point immediately preceding treatment, or, if no treatment is provided, at the entry point to the distribution system.

"Interest Buy-Down Agreement" means any agreement entered into between the Board, on behalf of the State, and a political subdivision, for the purpose of reducing the cost of financing incurred by a political subdivision on bonds issued by the subdivision for drinking water project costs.

"Labor Camp" shall mean one or more buildings, structures, or grounds set aside for use as living quarters for groups of migrant laborers or temporary housing facilities intended to accommodate construction, industrial, mining or demolition workers.

"Lake / reservoir" refers to a natural or man made basin or hollow on the Earth's surface in which water collects or is stored that may or may not have a current or single direction of flow.

"Land management strategies" means zoning and non-zoning controls which include, but are not limited to, the following: zoning and subdivision ordinances, site plan reviews, design and operating standards, source prohibitions, purchase of property and development rights, public education programs, ground water monitoring, household hazardous waste collection programs, water conservation programs, memoranda of understanding, written contracts and agreements, and so forth.

"Land use agreement" means a written agreement, memoranda or contract wherein the owner(s) agrees not to locate or allow the location of uncontrolled potential contamination sources or pollution sources within zone one of new wells in protected aquifers or zone one of surface water sources. The owner(s) must also agree not to locate or allow the location of pollution sources within zone two of new wells in unprotected aquifers and new springs unless the pollution source agrees to install design standards which prevent contaminated discharges to ground water. This restriction must be binding on all heirs, successors, and assigns. Land use agreements must be recorded with the property description in the local county recorder's office. Refer to R309-600-13(2)(d).

Land use agreements for protection areas on publicly

owned lands need not be recorded in the local county recorder office. However, a letter must be obtained from the Administrator of the land in question and meet the requirements described above.

"Large water system" for the purposes of R309-210-6 only, means a water system that serves more than 50,000 persons.

"Lead free" means, for the purposes of R309-210-6, when used with respect to solders and flux refers to solders and flux containing not more than 0.2 percent lead; when used with respect to pipes and pipe fittings refers to pipes and pipe fittings containing not more than 8.0 percent lead; and when used with respect to plumbing fittings and fixtures intended by the manufacturer to dispense water for human ingestion refers to fittings and fixtures that are in compliance with standards established in accordance with 42 U.S.C. 300 g-6(e).

"Lead service line" means a service line made of lead which connects the water main to the building inlet and any lead pigtail, gooseneck or other fitting which is connected to such lead line.

"Legionella" means a genus of bacteria, some species of which have caused a type of pneumonia called Legionnaires Disease.

"Locational running annual average (LRAA)" is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

"Major Bacteriological Routine Monitoring Violation" means that no routine bacteriological sample was taken as required by R309-210-5(1).

"Major Bacteriological Repeat Monitoring Violation" - means that no repeat bacteriological sample was taken as required by R309-210-5(2).

"Major Chemical Monitoring Violation" - means that no initial background chemical sample was taken as required in R309-515-4(5).

"Management area" means the area outside of zone one and within a two-mile radius where the Optional Two-mile Radius Delineation Procedure has been used to identify a protection area.

For wells, land may be excluded from the DWSP management area at locations where it is more than 100 feet lower in elevation than the total drilled depth of the well.

For springs and tunnels, the DWSP management area is all land at elevation equal to or higher than, and within a two-mile radius, of the spring or tunnel collection area. The DWSP management area also includes all land lower in elevation than, and within 100 horizontal feet, of the spring or tunnel collection area. The elevation datum to be used is the point of water collection. Land may also be excluded from the DWSP management area at locations where it is separated from the ground water source by a surface drainage which is lower in elevation than the spring or tunnel collection area.

"Man-Made Beta Particle and Photon Emitters" means all radionuclides emitting beta particles and/or photons listed in Maximum Permissible Body Burdens and maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure, "NBS Handbook 69," except the daughter products of thorium-232, uranium-235 and uranium-238.

"Master Plan" (or "System Capacity and Expansion Report") means a organized plan addressing the present and future demands that will be placed on a public drinking water system by expanding into undeveloped areas or accepting additional service contracts. As a minimum a satisfactory master plan must contain the following elements:

(a) A listing of sources including: the source name, the source type (i.e., well, spring, reservoir, stream etc.) for both

existing sources and additional sources identified as needed for system expansion, the minimum reliable flow of the source in gallons per minute, the status of the water right and the flow capacity of the water right.

(b) A listing of storage facilities including: the storage tank name, the type of material (i.e., steel, concrete etc.), the diameter, the total volume in gallons, and the elevation of the overflow, the lowest level (elevation) of the equalization volume, the fire suppression volume, and the emergency volume or the outlet.

(c) A listing of pump stations including: the pump station name and the pumping capacity in gallons per minute. Under this requirement one does not need to list well pump stations as they are provided in requirement (a) above.

(d) A listing of the various pipeline sizes within the distribution system with their associated pipe materials and, if readily available, the approximate length of pipe in each size and material category. A schematic of the distribution piping showing node points, elevations, length and size of lines, pressure zones, demands, and coefficients used for the hydraulic analysis required by (h) below will suffice.

(e) A listing by customer type (i.e., single family residence, 40 unit condominium complex, elementary school, junior high school, high school, hospital, post office, industry, commercial etc.) along with an assessment of their associated number of ERC'S.

(f) The number of connections along with their associated ERC value that the public drinking water system is committed to serve, but has not yet physically connected to the infrastructure.

(g) A description of the nature and extent of the area currently served by the water system and a plan of action to control addition of new service connections or expansion of the public drinking water system to serve new development(s). The plan shall include current number of service connections and water usage as well as land use projections and forecasts of future water usage.

(h) A hydraulic analysis of the existing distribution system along with any proposed distribution system expansion identified in (g) above.

(i) A description of potential alternatives to manage system growth, including interconnections with other existing public drinking water systems, developer responsibilities and requirements, water rights issues, source and storage capacity issues and distribution issues.

"Maximum Contaminant Level" (MCL) means the maximum permissible level of a contaminant in water which is delivered to any user of a public water system.

"Maximum residual disinfectant level" (MRDL) means a level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. For chlorine and chloramines, a PWS is in compliance with the MRDL when the running annual average of monthly averages of samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL. For chlorine dioxide, a PWS is in compliance with the MRDL when daily samples are taken at the entrance to the distribution system and no two consecutive daily samples exceed the MRDL. MRDLs are enforceable in the same manner as MCLs pursuant to UT Code S 19-4-104. There is convincing evidence that addition of a disinfectant is necessary for control of waterborne microbial contaminants. Notwithstanding the MRDLs listed in R309-200-5(3), operators may increase residual disinfectant levels of chlorine or chloramines (but not chlorine dioxide) in the distribution system to a level and for a time necessary to protect public health to address specific microbiological contamination problems caused by circumstances such as distribution line breaks, storm runoff

events, source water contamination, or cross-connections.

"Maximum residual disinfectant level goal" (MRDLG) means the maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MRDLGs are non-enforceable health goals and do not reflect the benefit of the addition of the chemical for control of waterborne microbial contaminants.

"Medium-size water system" for the purposes of R309-210-6 only, means a water system that serves greater than 3,300 and less than or equal to 50,000 persons.

"Membrane filtration" is a pressure or vacuum driven separation process in which particulate matter larger than 1 micrometer is rejected by an engineered barrier, primarily through a size-exclusion mechanism, and which has a measurable removal efficiency of a target organism that can be verified through the application of a direct integrity test. This definition includes that common membrane technologies of microfiltration, ultrafiltration, nanofiltration, and reverse osmosis.

"Metropolitan area sources" means all sources within a metropolitan area. A metropolitan area is further defined to contain at least 3,300 year round residents. A small water system which has sources within a metropolitan system's service area, may have those sources classified as a metropolitan area source.

"MG" means million gallons and is one way of expressing a volume of water.

"MGD" means million gallons per day and is one way of expressing average daily water demands experienced by public water systems or the capacity of a water treatment plant.

"mg/L" means milligrams per liter and is one way of expressing the concentration of a chemical in water. At small concentrations, mg/L is synonymous with "ppm" (parts per million).

"Minor Bacteriological Routine Monitoring Violation" means that not all of the routine bacteriological samples were taken as required by R309-210-5(1).

"Minor Bacteriological Repeat Monitoring Violation" means that not all of the repeat bacteriological samples were taken as required by R309-210-5(2).

"Minor Chemical Monitoring Violation" means that the required chemical sample(s) was not taken in accordance with R309-205 and R309-210.

"Modern Recreation Camp" means a campground accessible by any type of vehicular traffic. The camp is used wholly or in part for recreation, training or instruction, social, religious, or physical education activities or whose primary purpose is to provide an outdoor group living experience. The site is equipped with permanent buildings for the purpose of sleeping, a drinking water supply under pressure, food service facilities, and may be operated on a seasonal or short term basis. These types of camps shall include but are not limited to privately owned campgrounds such as youth camps, church camps, boy or girl scout camps, mixed age groups, family group camps, etc.

"Near the first service connection" means one of the service connections within the first 20 percent of all service connections that are nearest to the treatment facilities.

"Negative Interest" means a loan having loan terms with an interest rate at less than zero percent. The repayment schedule for loans having a negative interest rate will be prepared by the Board.

"New ground water source of drinking water" means a public supply ground water source of drinking water for which plans and specifications are submitted to the Division after July 26, 1993.

"New surface water source of drinking water" means a public supply surface water source of drinking water for which plans and specifications are submitted to the Division after June 12, 2000.

"New Water System" means a system that will become a community water system or non-transient, non-community water system on or after October 1, 1999.

"Non-Community Water System" (NCWS) means a public water system that is not a community water system. There are two types of NCWS's: transient and non-transient.

"Non-distribution system plumbing problem" means a coliform contamination problem in a public water system with more than one service connection that is limited to the specific service connection from which a coliform-positive sample was taken.

"Nonpoint source" means any diffuse source of contaminants or pollutants not otherwise defined as a point source.

"Non-Transient Non-Community Water System" (NTNCWS) means a public water system that regularly serves at least 25 of the same nonresident persons per day for more than six months per year. Examples of such systems are those serving the same individuals (industrial workers, school children, church members) by means of a separate system.

"Not Approved" refers to a rating placed on a system by the Division and means the water system does not fully comply with all the Rules of R309 as measured by R309-400.

"NTU" means Nephelometric Turbidity Units and is an acceptable method for measuring the clarity of water utilizing an electronic nephelometer (see "Standard Methods for Examination of Water and Wastewater").

"Off-specification" means a UV facility is operating outside of the validated operating conditions, for example, at a flow rate higher than the validated range or a UVT below the validated range).

"Operator" means a person who operates, repairs, maintains, and is directly employed by a public drinking water system.

"Operator Certification Commission" means the Commission appointed by the Board as an advisory Commission on public water system operator certification.

"Operating Permit" means written authorization from the Director to actually start utilizing a facility constructed as part of a public water system.

"Optimal corrosion control treatment" for the purposes of R309-210-6 only, means the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while insuring that the treatment does not cause the water system to violate any national primary drinking water regulations.

"Package Plants" refers to water treatment plants manufactured and supplied generally by one company which are reportedly complete and ready to hook to a raw water supply line. Caution, some plants do not completely comply with all requirements of these rules and will generally require additional equipment.

"PCBs" means a group of chemicals that contain polychlorinated biphenyl.

"Peak Day Demand" means the amount of water delivered to consumers by a public water system on the day of highest consumption, generally expressed in gpd or MGD. This peak day will likely occur during a particularly hot spell in the summer. In contrast, some systems associated with the skiing industry may experience their "Peak Day Demand" in the winter.

"Peak Hourly Flow" means the maximum hourly flow rate from a water treatment plant and utilized when the plant is preparing disinfection profiling as called for in R309-215-14(2).

"Peak Instantaneous Demand" means calculated or estimated highest flowrate that can be expected through any water mains of the distribution network of a public water system at any instant in time, generally expressed in gpm or cfs (refer to section R309-510-9).

"Person" means an individual, corporation, company, association, partnership; municipality; or State, Federal, or tribal agency.

"Picocurie" (pCi) means that quantity of radioactive material producing 2.22 nuclear transformations per minute.

"Plan Approval" means written approval, by the Director, of contract plans and specifications for any public drinking water project which have been submitted for review prior to the start of construction (see also R309-500-7).

"Plant intake" refers to the works or structures at the head of a conduit through which water is diverted from a source (e.g., river or lake) into the treatment plant.

"Plug Flow" is a term to describe when water flowing through a tank, basin or reactors moves as a plug of water without ever dispersing or mixing with the rest of the water flowing through the tank.

"Point of Disinfectant Application" is the point where the disinfectant is applied and water downstream of that point is not subject to re-contamination by surface water runoff.

"Point of Diversion"(POD) is the point at which water from a surface source enters a piped conveyance, storage tank, or is otherwise removed from open exposure prior to treatment.

"Point-of-Entry Treatment Device" means a treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building.

"Point-of-Use Treatment Device" means a treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one tap.

"Point source" means any discernible, confined, and discrete source of pollutants or contaminants, including but not limited to any site, pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, animal feeding operation with more than ten animal units, landfill, or vessel or other floating craft, from which pollutants are or may be discharged.

"Political Subdivision" means any county, city, town, improvement district, metropolitan water district, water conservancy district, special service district, drainage district, irrigation district, separate legal or administrative entity created under Title 11, Chapter 13, Interlocal Cooperation Act, or any other entity constituting a political subdivision under the laws of Utah.

"Pollution source" means point source discharges of contaminants to ground or surface water or potential discharges of the liquid forms of "extremely hazardous substances" which are stored in containers in excess of "applicable threshold planning quantities" as specified in SARA Title III. Examples of possible pollution sources include, but are not limited to, the following: storage facilities that store the liquid forms of extremely hazardous substances, septic tanks, drain fields, class V underground injection wells, landfills, open dumps, landfilling of sludge and septage, manure piles, salt piles, pit privies, drain lines, and animal feeding operations with more than ten animal units.

The following definitions are part of R309-600 and clarify the meaning of "pollution source:"

(1) "Animal feeding operation" means a lot or facility where the following conditions are met: animals have been or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period, and crops, vegetation forage growth, or post-harvest residues are not

sustained in the normal growing season over any portion of the lot or facility. Two or more animal feeding operations under common ownership are considered to be a single feeding operation if they adjoin each other, if they use a common area, or if they use a common system for the disposal of wastes.

(2) "Animal unit" means a unit of measurement for any animal feeding operation calculated by adding the following numbers; the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 55 pounds multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

(3) "Extremely hazardous substances" means those substances which are identified in the Sec. 302(EHS) column of the "TITLE III LIST OF LISTS - Consolidated List of Chemicals Subject to Reporting Under SARA Title III," (EPA 550-B-96-015). A copy of this document may be obtained from: NCEPI, PO Box 42419, Cincinnati, OH 45202. Online ordering is also available at <http://www.epa.gov/ncepihom/orderpub.html>.

"Potential contamination source" means any facility or site which employs an activity or procedure which may potentially contaminate ground or surface water. A pollution source is also a potential contamination source.

"ppm" means parts per million and is one way of expressing the concentration of a chemical in water. At small concentrations generally used, ppm is synonymous with "mg/l" (milligrams per liter).

"Practical Quantitation Level" (PQL) means the required analysis standard for laboratory certification to perform lead and copper analyses. The PQL for lead is .005 milligrams per liter and the PQL for copper is 0.050 milligrams per liter.

"Presedimentation" is a preliminary treatment process used to remove gravel, sand and other particulate material from the source water through settling before the water enters the primary clarification and filtration processes in a treatment plant.

"Primary Disinfection" means the adding of an acceptable primary disinfectant or ultraviolet light irradiation during the treatment process to provide adequate levels of inactivation of bacteria and pathogens. The effectiveness is measured through "CT" values, and the "Total Inactivation Ratio," and the ultraviolet light dose. Acceptable primary disinfectants are, chlorine, ozone, ultraviolet light, and chlorine dioxide (see also "CT" and "CT_{99.9}").

"Principal Forgiveness" means a loan wherein a portion of the loan amount is "forgiven" upon closing the loan. The terms for principal forgiveness will be as directed by R309-705-8, and by the Board.

"Project Costs" include the cost of acquiring and constructing any drinking water project including, without limitation: the cost of acquisition and construction of any facility or any modification, improvement, or extension of such facility; any cost incident to the acquisition of any necessary property, easement or right of way; engineering or architectural fees, legal fees, fiscal agent's and financial advisors' fees; any cost incurred for any preliminary planning to determine the economic and engineering feasibility of a proposed project; costs of economic investigations and studies, surveys, preparation of designs, plans, working drawings, specifications and the inspection and supervision of the construction of any facility; interest accruing on loans made under this program during acquisition and construction of the project; and any other cost incurred by the political subdivision, the Board or the Department of Environmental Quality, in connection with the issuance of obligation of the political subdivision to evidence any loan made to it under the law.

"Protected aquifer" means a producing aquifer in which the following conditions are met:

(1) A naturally protective layer of clay, at least 30 feet in thickness, is present above the aquifer;

(2) the PWS provides data to indicate the lateral continuity of the clay layer to the extent of zone two; and

(3) the public supply well is grouted with a grout seal that extends from the ground surface down to at least 100 feet below the surface, and for a thickness of at least 30 feet through the protective clay layer.

"Public Drinking Water Project" means construction, addition to, or modification of any facility of a public water system which may affect the quality or quantity of the drinking water (see also section R309-500-6).

"Public Water System" (PWS) means a system, either publicly or privately owned, providing water through constructed conveyances for human consumption and other domestic uses, which has at least 15 service connections or serves an average of at least 25 individuals daily at least 60 days out of the year and includes collection, treatment, storage, or distribution facilities under the control of the operator and used primarily in connection with the system, or collection, pretreatment or storage facilities used primarily in connection with the system but not under his control (see 19-4-102 of the Utah Code Annotated). All public water systems are further categorized into three different types, community (CWS), non-transient non-community (NTNCWS), and transient non-community (TNCWS). These categories are important with respect to required monitoring and water quality testing found in R309-205 and R309-210 (see also definition of "water system").

"Raw Water" means water that is destined for some treatment process that will make it acceptable as drinking water. Common usage of terms such as lake or stream water, surface water or irrigation water are synonymous with raw water.

"Recreational Home Developments" are subdivision type developments wherein the dwellings are not intended as permanent domiciles.

"Recreational Vehicle Park" means any site, tract or parcel of land on which facilities have been developed to provide temporary living quarters for individuals utilizing recreational vehicles. Such a park may be developed or owned by a private, public or non-profit organization catering to the general public or restricted to the organizational or institutional member and their guests only.

"Reference UV Sensors (or Reference Sensors)" are off-line calibrated UV sensors that are used to assess the duty UV sensors' performance and to determine UV sensor uncertainty.

"Regional Operator" means a certified operator who is in direct responsible charge of more than one public drinking water system.

"Regionalized Water System" means any combination of water systems which are physically connected or operated or managed as a single unit.

"Rem" means the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A "millirem" (mrem) is 1/1000 of a rem.

"Renewal Course" means a course of instruction, approved by the Subcommittee, which is a prerequisite to the renewal of a Backflow Technician's Certificate.

"Repeat compliance period" means any subsequent compliance period after the initial compliance period.

"Replacement well" means a public supply well drilled for the sole purpose of replacing an existing public supply well which is impaired or made useless by structural difficulties and in which the following conditions are met:

(1) the proposed well location shall be within a radius of 150 feet from an existing ground water supply well; and

(2) the PWS provides a copy of the replacement application approved by the State Engineer (refer to Section 73-3-28 of the Utah Code).

"Required Dose" is the UV dose required for a certain level of log inactivation. Required doses are set forth by the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and R309-215-15(19)(d)(i) Table 215-5 the UV Dose Table.

"Required reserve" means funds set aside to meet requirements set forth in a loan covenant/bond indenture.

"Residual Disinfectant Concentration" ("C" in CT calculations) means the concentration of disinfectant, measured in mg/L, in a representative sample of water.

"Restricted Certificate" means that the operator has qualified by passing an examination but is in a restricted certification status due to lack of experience as an operator.

"Roadway Rest Stop" shall mean any building, or buildings, or grounds, parking areas, including the necessary toilet, hand washing, water supply and wastewater facilities intended for the accommodation of people using such facilities while traveling on public roadways. It does not include scenic view or roadside picnic areas or other parking areas if these are properly identified

"Routine Chemical Monitoring Violation" means no routine chemical sample(s) was taken as required in R309-205, R309-210 and R309-215.

"Safe Yield" means the annual quantity of water that can be taken from a source of supply over a period of years without depleting the source beyond its ability to be replenished naturally in "wet years".

"Sanitary Seal" means a cap that prevents contaminants from entering a well through the top of the casing.

"scfm/sf" means standard cubic foot per minute per square foot and is one way of expressing flowrate of air at standard density through a filter or duct area.

"Secondary Disinfection" means the adding of an acceptable secondary disinfectant to assure that the quality of the water is maintained throughout the distribution system. The effectiveness is measured by maintaining detectable disinfectant residuals throughout the distribution system. Acceptable secondary disinfectants are chlorine, chloramine, and chlorine dioxide.

"Secondary Maximum Contaminant Level" means the advisable maximum level of contaminant in water which is delivered to any user of a public water system.

"Secretary to the Subcommittee" means that individual appointed by the Director to conduct the business of the Subcommittee.

"Sedimentation" means a process for removal of solids before filtration by gravity or separation.

"Semi-Developed Camp" means a campground accessible by any type of vehicular traffic. Facilities are provided for both protection of site and comfort of users. Roads, trails and campsites are defined and basic facilities (water, flush toilets and/or vault toilets, tables, fireplaces or tent pads) are provided. These camps include but are not limited to National Forest campgrounds, Bureau of Reclamation campgrounds, and youth camps.

"Service Connection" means the constructed conveyance by which a dwelling, commercial or industrial establishment, or other water user obtains water from the supplier's distribution system. Multiple dwelling units such as condominiums or apartments, shall be considered to have a single service connection, if fed by a single line, for the purpose of microbiological repeat sampling; but shall be evaluated by the supplier as multiple "equivalent residential connections" for the purpose of source and storage capacities.

"Service Factor" means a rating on a motor to indicate an increased horsepower capacity beyond nominal nameplate

capacity for occasional overload conditions.

"Service line sample" means a one-liter sample of water collected in accordance with R309-210-6(3)(b)(iii), that has been standing for at least 6 hours in a service line.

"Significant deficiencies" means defects in design, operation, or maintenance, or a failure or defects in design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that the Director determines to be causing, or have potential for causing, the introduction of contamination into the water delivered to consumers.

"Single family structure" for the purposes of R309-210-6 only, means a building constructed as a single-family residence that is currently used as either a residence or a place of business.

"Small water system" means a public water system that serves 3,300 persons or fewer.

"Specialist" means a person who has successfully passed the written certification exam and meets the required experience, but who is not in direct employment with a Utah public drinking water system.

"Stabilized drawdown" means that there is less than 0.5 foot of change in water level measurements in a pumped well for a minimum period of six hours.

"Standard sample" means the aliquot of finished drinking water that is examined for the presence of coliform bacteria.

"SOCs" means synthetic organic chemicals.

"Stabilized Drawdown" means the drawdown measurements taken during a constant-rate yield and drawdown test as outlined in subsection R309-515-14(10)(b) are constant (no change).

"Stock Tight" means a type of fence that can prevent the passage of grazing livestock through its boundary. An example of such fencing is provided by design drawing 02838-3 titled "Cattle Enclosure" designed by the U.S. Department of the Interior, Bureau of Land Management, Division of Technical Services (copies available from the Division).

"Subcommittee" means the Cross Connection Control Subcommittee.

"Supplier of water" means any person who owns or operates a public water system.

"Surface Water" means all water which is open to the atmosphere and subject to surface runoff (see also section R309-515-5(1)). This includes conveyances such as ditches, canals and aqueducts, as well as natural features.

"Surface Water Systems" means public water systems using surface water or ground water under the direct influence of surface water as a source that are subject to filtration and disinfection (Federal SWTR subpart H) and the requirements of R309-215 "Monitoring and Water Quality: Treatment Plant Monitoring Requirements."

"Surface Water Systems (Large)" means public water systems using surface water or ground water under the direct influence of surface water as a source that are subject to filtration and disinfection and serve a population of 10,000 or greater (Federal SWTR subpart P and L) and the requirements of R309-215 "Monitoring and Water Quality: Treatment Plant Monitoring Requirements."

"Surface Water Systems (Small)" means public water systems using surface water or ground water under the direct influence of surface water as a source that are subject to filtration and disinfection and serve a population less than 10,000 (Federal SWTR subpart L, T and P (sanitary survey requirements)) and the requirements of R309-215

"Monitoring and Water Quality: Treatment Plant Monitoring Requirements."

"Susceptibility" means the potential for a PWS (as determined at the point immediately preceding treatment, or if

no treatment is provided, at the entry point to the distribution system) to draw water contaminated above a demonstrated background water quality concentration through any overland or subsurface pathway. Such pathways may include cracks or fissures in or open areas of the surface water intake, and/or the wellhead, and/or the pipe/conveyance between the intake and the water distribution system or treatment.

"SUVA" means Specific Ultraviolet Absorption at 254 nanometers (nm), an indicator of the humic content of water. It is a calculated parameter obtained by dividing a sample's ultraviolet absorption at a wavelength of 254 nm (UV_{254}) (in m^{-1}) by its concentration of dissolved organic carbon (DOC) (in mg/L).

"System with a single service connection" means a system which supplies drinking water to consumers via a single service line.

"T" is short for "Contact Time" and is generally used in conjunction with either the residual disinfectant concentration (C) in determining CT or the velocity gradient (G) in determining mixing energy GT.

"Target Log Inactivation" means the specific log inactivation the PWS wants to achieve for the target pathogen using UV disinfection. The target log inactivation is driven by requirements of the Surface Water Treatment Rule (SWTR), Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR), Interim Enhanced Surface Water Treatment Rule (IESWTR), Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), and the log removal/inactivation requirements in R309-215-15, and the Groundwater Rule.

"Ten State Standards" refers to the Recommended Standards For Water Works, 1997 by the Great Lakes Upper Mississippi River Board of State Public Health and Environmental Managers available from Health Education Services, A Division of Health Research Inc., P.O. Box 7126, Albany, New York 12224, (518)439-7286.

"Time of travel" means the time required for a particle of water to move in the producing aquifer from a specific point to a ground water source of drinking water. It also means the time required for a particle of water to travel from a specific point along a surface water body to an intake.

"Total Inactivation Ratio" is the sum of all the inactivation ratios calculated for a series of disinfection sequences, and is indicated or shown as: "Summation sign ($CT_{calc})/(CT_{req'd})$." A total inactivation ratio equal to or greater than 1.0 is assumed to provide the required inactivation of *Giardia lamblia* cysts. $CT_{calc}/CT_{99.9}$ equal to 1.0 provides 99.9 percent (3-log) inactivation, whereas CT_{calc}/CT_{90} equal to 1.0 only provides 90 percent (1-log) inactivation.

"Too numerous to count" (TNTC) means that the total number of bacterial colonies exceeds 200 on a 47 mm diameter membrane filter used for coliform detection.

"Total Organic Carbon" (TOC) means total organic carbon in mg/L measured using heat, oxygen, ultraviolet irradiation, chemical oxidants, or combinations of these oxidants that convert organic carbon to carbon dioxide, rounded to two significant figures.

"Total Trihalomethanes" (TTHM) means the MCL for trihalomethanes. This is the sum of four of ten possible isomers of chlorine/bromine/methane compounds, all known as trihalomethanes (THM). TTHM is defined as the arithmetic sum of the concentrations in micro grams per liter of only four of these (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) rounded to two significant figures. This measurement is made by samples which are "quenched," meaning that a chlorine neutralizing agent has been added, preventing further THM formation in the samples.

"Training Coordinating Committee" means the voluntary

association of individuals responsible for environmental training in the state of Utah.

"Transient Non-Community Water System" (TNCWS) means a non-community public water system that does not serve 25 of the same nonresident persons per day for more than six months per year. Examples of such systems are those, RV park, diner or convenience store where the permanent nonresident staff number less than 25, but the number of people served exceeds 25.

"Treatment Plant" means those facilities capable of providing any treatment to any waterserving a public drinking water system. (Examples would include but not be limited to disinfection, conventional surface water treatment, alternative surface water treatment methods, corrosion control methods, aeration, softening, etc.).

"Treatment Plant Manager" means the individual responsible for all operations of a treatment plant.

"Trihalomethanes" (THM) means any one or all members of this class of organic compounds.

"Trihalomethane Formation Potential" (THMFP) - these samples are collected just following disinfection and measure the highest possible TTHM value to be expected in the water distribution system. The formation potential is measured by not neutralizing the disinfecting agent at the time of collection, but storing the sample seven days at 25 degrees C prior to analysis. A chlorine residual must be present in these samples at the end of the seven day period prior to analysis for the samples to be considered valid for this test. Samples without a residual at the end of this period must be resampled if this test is desired.

"Turbidity Unit" refers to NTU or Nephelometric Turbidity Unit.

"Two-stage lime softening" is a process in which chemical addition and hardness precipitation occur in each of two distinct unit clarification processes in series prior to filtration.

"UDI" means under direct influence (see also "Ground Water Under the Direct Influence of Surface Water").

"Uncovered finished water storage facility" is a tank, reservoir, or other facility used to store water that will undergo no further treatment to reduce microbial pathogens except residual disinfection and is directly open to the atmosphere.

"Unprotected aquifer" means any aquifer that does not meet the definition of a protected aquifer.

"Unregulated Contaminant" means a known or suspected disease causing contaminant for which no maximum contaminant level has been established.

"Unrestricted Certificate" means that a certificate of competency issued by the Director when the operator has passed the appropriate level written examination and has met all certification requirements at the discipline and grade stated on the certificate.

"UV Dose" means the UV energy per unit area incident on a surface, typically reported in units of mJ/cm^2 or J/m^2 . The UV dose received by a waterborne microorganism in a reactor vessel accounts for the effects on UV intensity of the absorbance of the water, absorbance of the quartz sleeves, reflection and refraction of light from the water surface and reactor walls, and the germicidal effectiveness of the UV wavelengths transmitted. The following terms are related to UV dose:

(1) "Reduction Equivalent Dose (RED)" means the UV dose derived by entering the log inactivation measured during full-scale reactor testing into the UV dose-response curve that was derived through collimated beam testing. RED values are always specific to the challenge microorganism used during experimental testing and the validation test conditions for full-scale reactor testing.

(2) "Required Dose" means the UV dose in units of mJ/cm^2 needed to achieve the target log inactivation for the target pathogen. The required dose is specified in the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR).

(3) "Validated Dose" means the UV dose in units of mJ/cm^2 delivered by the UV reactor as determined through validation testing. The validated dose is compared to the Required Dose to determine log inactivation credit.

(4) "Calculated Dose" - the RED calculated using the dose-monitoring equation that was developed through validation testing.

"UV Facility" means all of the components of the UV disinfection process, including (but not limited to) UV reactors, control systems, piping, valves, and building (if applicable).

"UV Intensity" means the UV power passing through a unit area perpendicular to the direction of propagation. UV intensity is used to describe the magnitude of UV light measured by UV sensors in a reactor or with a radiometer in bench-scale UV experiments.

"UV Reactor" means the vessel or chamber where exposure to UV light takes place, consisting of UV lamps, quartz sleeves, UV sensors, quartz sleeve cleaning systems, and baffles or other hydraulic controls. The UV reactor also includes additional hardware for monitoring UV dose delivery; typically comprised of (but not limited to): UV sensors and UVT monitors.

"UV Reactor Validation" is experimental testing to determine the operating conditions under which a UV reactor delivers the dose required for inactivation credit of *Cryptosporidium*, *Giardia lamblia*, and viruses.

"UV Transmittance (UVT)" is a measure of the fraction of incident light transmitted through a material (e.g., water sample or quartz). The UVT is usually reported for a wavelength of 254 nm and a pathlength of 1-cm. If an alternate pathlength is used, it should be specified or converted to units of cm^{-1} .

"Validation Factor" - an uncertainty term that accounts for the bias and uncertainty associated with UV validation testing.

"Validated Operating Conditions" - the operating conditions under which the UV reactor is confirmed as delivering the dose required for LT2ESWTR inactivation credit. These operating conditions must include flow rate, UV intensity as measured by a UV sensor, and UV lamp status. The term "Validated Operating Conditions" is also commonly referred to as the "validated range" or the "validated limits."

"Virus" means a virus of fecal origin which is infectious to humans.

"Waterborne Disease Outbreak" means the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a public water system, as determined by the appropriate local or State agency.

"Watershed" means the topographic boundary that is the perimeter of the catchment basin that contributes water through a surface source to the intake structure. For the purposes of surface water DWSP, if the topographic boundary intersects the state boundary, the state boundary becomes the boundary of the watershed.

"Water Supplier" means a person who owns or operates a public drinking water system.

"Water System" means all lands, property, rights, rights-of-way, easements and related facilities owned by a single entity, which are deemed necessary or convenient to deliver drinking water from source to the service connection of a consumer(s). This includes all water rights acquired in connection with the system, all means of conserving,

controlling and distributing drinking water, including, but not limited to, diversion or collection works, springs, wells, treatment plants, pumps, lift stations, service meters, mains, hydrants, reservoirs, tanks and associated appurtenances within the property or easement boundaries under the control of or controlled by the entity owning the system.

In accordance with R309, certain water systems may be exempted from monitoring requirements, but such exemption does not extend to submittal of plans and specifications for any modifications considered a public drinking water project.

"Wellhead" means the physical structure, facility, or device at the land surface from or through which ground water flows or is pumped from subsurface, water-bearing formations.

"Wholesale system" is a public water system that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another public water system. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

"Zone of Influence" corresponds to area of the upper portion of the cone of depression as described in "Groundwater and Wells," second edition, by Fletcher G. Driscoll, Ph.D., and published by Johnson Division, St. Paul, Minnesota.

KEY: drinking water, definitions

May 9, 2011

19-4-104

Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.

R309-115. Administrative Procedures.

R309-115-1. Administrative Procedures.

Administrative proceedings under Utah Safe Drinking Water Act are governed by Rule R305-7.

KEY: drinking water, adjudicative proceedings, administrative proceedings, hearings

August 29, 2011

19-1-301

Notice of Continuation March 13, 2015

19-1-301.5

R309. Environmental Quality, Drinking Water.
R309-200. Monitoring and Water Quality: Drinking Water Standards.

R309-200-1. Purpose.

The purpose of this rule is to set forth the water quality and drinking water standards for public water systems.

R309-200-2 Authority.

R309-200-3 Definitions.

R309-200-4 General.

R309-200-5 Primary Drinking Water Standards

(1) Inorganic Contaminants

(2) Lead and Copper

(3) Organic Monitoring.

(4) Radiological Chemicals.

(5) Turbidity.

(6) Microbiological quality

(7) Disinfection

R309-200-6 Secondary Drinking Water Standards.

R309-200-7 Treatment Techniques and Unregulated Contaminants.

R309-200-8 Approved Laboratories.

R309-200-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-200-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-200-4. General.

(1) Maximum contaminant levels (MCLs) and treatment techniques are herein established for those routinely measurable substances which may be found in water supplies. "Primary" standards and treatment techniques are established for the protection of human health. "Secondary" regulations are established to provide guidance in evaluating the aesthetic qualities of drinking water.

(2) The applicable "Primary" standards and treatment techniques shall be met by all public drinking water systems. The "Secondary" standards are recommended levels which should be met in order to avoid consumer complaint.

(3) The methods used to determine compliance with these maximum contaminant levels and treatment techniques are given in R309-205 through R309-215. Analytical techniques which shall be followed in making the required determinations shall be as given in 40 CFR 141 as published on July 1, 2008 by the Office of the Federal Register.

(4) Unless otherwise required by the Director, the effective dates on which new analytical methods shall be initiated are identical to the dates published in 40 CFR 141 on July 1, 2008 by the Office of the Federal Register.

(5) If the water fails to meet these minimum standards, then certain public notification procedures shall be carried out, as outlined in R309-220. Water suppliers shall also keep analytical records in their possession, for a required length of time, as outlined in R309-105-17.

R309-200-5. Primary Drinking Water Standards.

(1) Inorganic Contaminants.

(a) The maximum contaminant levels (MCLs) for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, sodium, thallium and total dissolved solids are applicable to community and non-transient non-community water systems.

(b) The MCLs for nitrate, nitrite, and total nitrate, nitrite

and sulfate are applicable to community, non-transient non-community, and transient non-community water systems.

(c) The maximum contaminant levels for inorganic chemicals are listed in Table 200-1.

TABLE 200-1
PRIMARY INORGANIC CONTAMINANTS

Contaminant	Maximum Contaminant Level
1. Antimony	0.006 mg/L
2. Arsenic	0.010 mg/L
3. Asbestos	(see Note 5 below) 7 Million Fibers/liter (longer than 10 um)
4. Barium	2 mg/L
5. Beryllium	0.004 mg/L
6. Cadmium	0.005 mg/L
7. Chromium	0.1 mg/L
8. Cyanide (as free Cyanide)	0.2 mg/L
9. Fluoride	4.0 mg/L
10. Mercury	0.002 mg/L
11. Nickel	--- (see Note 1 below)
12. Nitrate	10 mg/l (as Nitrogen) (see Note 4 below)
13. Nitrite	1 mg/L (as Nitrogen)
14. Total Nitrate and Nitrite	10 mg/L (as Nitrogen)
15. Selenium	0.05 mg/L
16. Sodium	--- (see Note 1 below)
17. Sulfate	1000 mg/L (see Note 2 below)
18. Thallium	0.002 mg/L
19. Total Dissolved Solids	2000 mg/L (see Note 3 below)
NOTE:	
(1) No maximum contaminant level has been established for nickel and sodium. However, these contaminant shall be monitored and reported in accordance with the requirements of R309-205-5(3).	
(2) If the sulfate level of a public (community, NTNC and non-community) water system is greater than 500 mg/L, the supplier shall satisfactorily demonstrate that:	
(a) No better quality water is available, and	
(b) The water shall not be available for human consumption from commercial establishments.	
In no case shall the Director allow the use of water having a sulfate level greater than 1000 mg/L.	
(3) If TDS is greater than 1000 mg/L, the supplier shall satisfactorily demonstrate to the Director that no better water is available. The Director shall not allow the use of an inferior source of water if a better source of water (i.e. lower in TDS) is available.	
(4) In the case of a non-community water systems which exceed the MCL for nitrate, the Director may allow, on a case-by-case basis, a nitrate level not to exceed 20 mg/L if the supplier can adequately demonstrate that:	
(a) such water will not be available to children under 6 months of age as may be the case in hospitals, schools and day care centers; and	
(b) there will be continuous posting of the fact that nitrate levels exceed 10 mg/L and the potential health effect of exposure in accordance with R309-220-12; and	
(c) the water is analyzed in conformance to R309-205-5(4); and	
(d) that no adverse health effects will result.	
(5) The maximum contaminant level for arsenic is 0.05 mg/L until January 23, 2006. The MCL of 0.010 mg/L is effective for the purposes of compliance on January 23, 2006.	

(2) Lead and copper.

(a) The lead action level is exceeded if the concentration of lead in more than 10 percent of tap water samples collected during any monitoring period conducted in accordance with R309-210-6(3) is greater than 0.015 mg/L (i.e., if the "90th percentile" lead level is greater than 0.015 mg/L).

(b) The copper action level is exceeded if the concentration of copper in more than 10 percent of tap water samples collected during any monitoring period conducted in

accordance with R309-210-6(3) is greater than 1.3 mg/L (i.e., if the "90th percentile" copper level is greater than 1.3 mg/L).

(c) The 90th percentile lead and copper levels shall be computed as follows:

(i) The results of all lead or copper samples taken during a monitoring period shall be placed in ascending order from the sample with the lowest concentration to the sample with the highest concentration. Each sampling result shall be assigned a number, ascending by single integers beginning with the number 1 for the sample with the lowest contaminant level. The number assigned to the sample with the highest contaminant level shall be equal to the total number of samples taken.

(ii) The number of samples taken during the monitoring period shall be multiplied by 0.9.

(iii) The contaminant concentration in the numbered sample yielded by the calculation in paragraph (c)(ii) above is the 90th percentile contaminant level.

(iv) For water systems serving fewer than 100 people that collect 5 samples per monitoring period, the 90th percentile is computed by taking the average of the highest and second highest concentrations.

(v) For a public water system that has been allowed by the Director to collect fewer than five samples in accordance with R309-210-6(3)(c), the sample result with the highest concentration is considered the 90th percentile value.

(3) Organic Contaminants.

The following are the maximum contaminant levels for organic chemicals. For the purposes of R309-100 through R309-R309-605, organic chemicals are divided into three categories: Pesticides/PCBs/SOCs, volatile organic contaminants (VOCs) and total trihalomethanes.

(a) Pesticides/PCBs/SOCs - The MCLs for organic contaminants listed in Table 200-2 are applicable to community water systems and non-transient, non-community water systems.

TABLE 200-2
PESTICIDE/PCB/SOC CONTAMINANTS

Contaminant Level	Maximum Contaminant
1. Alachlor	0.002 mg/L
2. Aldicarb	(see Note 1 below)
3. Aldicarb sulfoxide	(see Note 1 below)
4. Aldicarb sulfone	(see Note 1 below)
5. Atrazine	0.003 mg/L
6. Carbofuran	0.04 mg/L
7. Chlordane	0.002 mg/L
8. Dibromochloropropane	0.0002 mg/L
9. 2,4-D	0.07 mg/L
10. Ethylene dibromide	0.00005 mg/L
11. Heptachlor	0.0004 mg/L
12. Heptachlor epoxide	0.0002 mg/L
13. Lindane	0.0002 mg/L
14. Methoxychlor	0.04 mg/L
15. Polychlorinated biphenyls	0.0005 mg/L
16. Pentachlorophenol	0.001 mg/L
17. Toxaphene	0.003 mg/L
18. 2,4,5-TP	0.05 mg/L
19. Benzo(a)pyrene	0.0002 mg/L
20. Dalapon	0.2 mg/L
21. Di(2-ethylhexyl)adipate	0.4 mg/L
22. Di(2-ethylhexyl)phthalate	0.006 mg/L
23. Dinoseb	0.007 mg/L
24. Diquat	0.02 mg/L
25. Endothall	0.1 mg/L
26. Endrin	0.002 mg/L
27. Glyphosate	0.7 mg/L
28. Hexachlorobenzene	0.001 mg/L
29. Hexachlorocyclopentadiene	0.05 mg/L
30. Oxamyl (Vydate)	0.2 mg/L
31. Picloram	0.5 mg/L
32. Simazine	0.004 mg/L
33. 2,3,7,8-TCDD (Dioxin)	0.00000003 mg/L

Note 1: The MCL for this contaminant is under further review, however, this contaminant shall be monitored in

accordance with R309-205-6(1).

(b) Volatile organic contaminants - The maximum contaminant levels for organic contaminants listed in Table 200-3 apply to community and non-transient non-community water systems.

TABLE 200-3
VOLATILE ORGANIC CONTAMINANTS

Contaminant Level	Maximum Contaminant
1. Vinyl chloride	0.002 mg/L
2. Benzene	0.005 mg/L
3. Carbon tetrachloride	0.005 mg/L
4. 1,2-Dichloroethane	0.005 mg/L
5. Trichloroethylene	0.005 mg/L
6. para-Dichlorobenzene	0.075 mg/L
7. 1,1-Dichloroethylene	0.007 mg/L
8. 1,1,1-Trichloroethane	0.2 mg/L
9. cis-1,2-Dichloroethylene	0.07 mg/L
10. 1,2-Dichloropropane	0.005 mg/L
11. Ethylbenzene	0.7 mg/L
12. Monochlorobenzene	0.1 mg/L
13. o-Dichlorobenzene	0.6 mg/L
14. Styrene	0.1 mg/L
15. Tetrachloroethylene	0.005 mg/L
16. Toluene	1 mg/L
17. trans-1,2-Dichloroethylene	0.1 mg/L
18. Xylenes (total)	10 mg/L
19. Dichloromethane	0.005 mg/L
20. 1,2,4-Trichlorobenzene	0.07 mg/L
21. 1,1,2-Trichloroethane	0.005 mg/L

(c) Disinfection Byproducts and Disinfectant Residuals:

(i) Community and Non-transient non-community water systems. Surface Water systems serving 10,000 or more persons shall comply with this section beginning January 1, 2002. Surface water systems serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water shall comply with this section beginning January 1, 2004.

(A) Compliance with the disinfection byproduct MCLs listed in Table 200-4 shall be determined by the procedures listed in R309-210-8(6) until the date specified by system size listed in R309-210-10(1)(c) at which time compliance shall be determined utilizing LRAA as specified in R309-210-10(1)(d).

(ii) Transient non-community water systems. Surface water systems serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant shall comply with the chlorine dioxide MRDL beginning January 1, 2002. Surface water systems serving fewer than 10,000 persons and using chlorine dioxide as a disinfectant or oxidant and systems using only ground water not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant shall comply with the chlorine dioxide MRDL beginning January 1, 2004.

(iii) The maximum contaminant levels (MCLs) for disinfection byproducts are listed in Table 200-4.

TABLE 200-4
DISINFECTION BYPRODUCTS

DISINFECTION BYPRODUCT	MCL (mg/L)
Total trihalomethanes (TTHM)	0.080
Haloacetic acids (five) (HAA5)	0.060
Bromate	0.010
Chlorite	1.0

(iv) The maximum residual disinfectant levels (MRDLs) are listed in Table 200-5.

TABLE 200-5
MAXIMUM RESIDUAL DISINFECTANT LEVELS

DISINFECTANT RESIDUAL	MRDL (mg/L)
Chlorine	4.0 (as Cl ₂)

Chloramines	4.0 (as Cl ₂)
Chlorine dioxide	0.8 (as ClO ₂)

Radionuclide	Critical organ	pCi per
liter		
Tritium	Total body	20,000
Strontium-90	Bone Marrow	8

(v) Control of Disinfectant Residuals. Notwithstanding the MRDLs listed in Table 200-5, systems may increase residual disinfectant levels in the distribution system of chlorine or chloramines (but not chlorine dioxide) to a level and for a time necessary to protect public health, to address specific microbiological contamination problems caused by circumstances such as, but not limited to, distribution line breaks, storm run-off events, source water contamination events, or cross-connection events.

(vi) A system that is installing GAC or membrane technology to comply with this section may apply to the Director for an extension of up to 24 months past the dates in paragraph (c)(i) of this section, but not beyond December 31, 2003. In granting the extension, the Director shall set a schedule for compliance and may specify any interim measures that the system shall take. Failure to meet the schedule or interim treatment requirements constitutes a violation of Utah Public Drinking Water Rules.

(4) Radiologic Chemicals.

(a) Compliance dates. Compliance dates for combined radium-226 and -228, gross alpha particle activity, gross beta particle and photon radioactivity, and uranium: Community water systems shall comply with the MCLs listed in paragraphs (b), (c), (d), and (e) of this section beginning December 8, 2003 and compliance shall be determined in accordance with the requirements of this sub-section (4) and R309-205-7. Compliance with reporting requirements for the radionuclides under R309-220 and R309-225 is required on December 8, 2003.

(b) Combined radium-226 and -228. The maximum contaminant level for combined radium-226 and radium-228 is 5 pCi/L. The combined radium-226 and radium-228 value is determined by the addition of the results of the analysis for radium-226 and the analysis for radium-228.

(c) Gross alpha particle activity (excluding radon and uranium). The maximum contaminant level for gross alpha particle activity (including radium-226 but excluding radon and uranium) is 15 pCi/L.

(d) The MCL for beta particle and photon radioactivity.

(i) The average annual concentration of beta particle and photon radioactivity from man-made radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year (mrem/year).

(ii) Except for the radionuclides listed in Table 200-6, the concentration of man-made radionuclides causing 4 mrem total body or organ dose equivalents shall be calculated on the basis of 2 liters per day drinking water intake using the 168 hour data list in "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," NBS (National Bureau of Standards) Handbook 69 as amended August 1963, U.S. Department of Commerce. Copies of this document are available from the National Technical Information Service, NTIS ADA 280 282, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161. The toll-free number is 800-553-6847. Copies may be inspected at the Division of Drinking Water offices. If two or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ shall not exceed 4 mrem/year.

TABLE 200-6
MAN-MADE RADIONUCLIDE CONTAMINANTS

Average Annual Concentrations Assumed to Produce:
A Total Body or Organ Dose of 4 mrem/yr

(e) The MCL for uranium. The maximum contaminant level for uranium is 30 ug/L.

(5) TURBIDITY

(a) All public water systems using surface water or ground water under the direct influence of surface water shall provide treatment consisting of both disinfection, as specified in R309-200-5(7)(a), and filtration treatment which complies with the requirements of paragraph (i), (ii) or (iii) of this section.

(i) Conventional filtration treatment or direct filtration.

(A) For systems using conventional filtration or direct filtration, the turbidity level of representative samples of a system's combined filtered effluent water shall be less than or equal to 0.3 NTU in at least 95 percent of the measurements taken each month, measured as specified in R309-200-4(3) and R309-215-9.

(B) The turbidity level of representative samples of a system's combined filtered effluent water shall at no time exceed 1 NTU, measured as specified in R309-200-4(3) and R309-215-9.

(C) A system that uses lime softening may acidify representative samples prior to analysis using a protocol approved by the Director.

(ii) Filtration technologies other than conventional filtration treatment, direct filtration, slow sand filtration, or diatomaceous earth filtration. A public water system may use a filtration technology not listed in paragraph (i) or (iii) of this section if it demonstrates to the Director, using pilot plant studies or other means, that the alternative filtration technology, in combination with disinfection treatment that meets the requirements of R309-200-7, consistently achieves 99.9 percent removal and/or inactivation of *Giardia lamblia* cysts and 99.99 percent removal and/or inactivation of viruses, and 99 percent removal of *Cryptosporidium* oocysts, and the Director approves the use of the filtration technology. For each approval, the Director will set turbidity performance requirements that the system shall meet at least 95 percent of the time and that the system may not exceed at any time at a level that consistently achieves 99.9 percent removal and/or inactivation of *Giardia lamblia* cysts, 99.99 percent removal and/or inactivation of viruses, and 99 percent removal of *Cryptosporidium* oocysts. The turbidity level of representative samples shall at no time exceed 5.0 NTU for any treatment technique, measured as specified in R309-215-9(1)(c) and (d).

(iii) The turbidity limit for slow sand filtration and diatomaceous earth filtration shall be less than or equal to 1.0 NTU in at least 95 percent of the measurements taken each month, measured as specified in R309-215-9(1)(c) and (d). For slow sand filtration only, if the Director determines that the system is capable of achieving 99.9 percent removal and inactivation of *Giardia lamblia* cysts at some turbidity level higher than 1.0 NTU in at least 95 percent of the measurements, the Director may substitute this higher turbidity limit for that system. The turbidity level of representative samples shall at no time exceed 5.0 NTU for any treatment technique, measured as specified in R309-215-9(1)(c) and (d).

(c) Ground water sources not under the direct influence of surface water:

(i) The following turbidity limit applies to community water systems only.

(ii) The limit for turbidity in drinking water from ground water sources not under the direct influence of surface sources is 5.0 NTU based on an average for two consecutive

days pursuant to R309-205-8(3).

(6) MICROBIOLOGICAL QUALITY

(a) The maximum contaminant level (MCL) for microbiological contaminants for all public water systems is:

(i) For a system which collects less than 40 total coliform samples per month, no more than one sample per month may be total coliform-positive.

(ii) For a system which collects 40 or more total coliform samples per month, no more than 5.0 percent of the samples collected during a month may be total coliform-positive.

(b) Any fecal coliform-positive or *Escherichia coli* (E. coli)-positive repeat sample or any total coliform-positive repeat sample following a fecal coliform positive or E. coli-positive routine sample constitutes a violation of the MCL for total coliforms. For the purposes of public notification requirements in R309-220-5 this is a violation that may pose an acute risk to health.

(c) For NTNC and transient non-community systems that are required to sample at a rate of less than one per month, compliance with paragraphs (a) or (b) of this subsection shall be determined for the month in which the sample was taken.

(7) DISINFECTION

Continuous disinfection is recommended for all water sources. It shall be required of all ground water sources which do not consistently meet standards of bacteriologic quality. Surface water sources or ground water sources under direct influence of surface water shall be disinfected and continuously monitored for disinfection residual during the course of required conventional complete treatment for systems serving greater than 3,300 people. Disinfection shall not be considered a substitute for inadequate collection or filtration facilities.

Successful disinfection assures 99.9 percent inactivation of *Giardia lamblia* cysts and 99.99 percent inactivation of enteric viruses. Both filtration and disinfection are considered treatment techniques to protect against the potential adverse health effects of exposure to *Giardia lamblia*, viruses, *Legionella*, and heterotrophic bacteria in water. Minimum disinfection levels are set by "CT" values as defined in R309-110.

(a) Each public water system that provides filtration treatment shall provide disinfection treatment as follows:

(i) The disinfection treatment shall be sufficient to ensure that the total treatment processes of the system achieve at least 99.9 percent (3-log) inactivation and/or removal of *Giardia lamblia* cysts and at least 99.99 percent (4-log) inactivation and/or removal of viruses, as determined by the Director.

(ii) The residual disinfectant concentration in the water entering the distribution system cannot be less than 0.2 mg/L for more than 4 hours.

(iii) The residual disinfectant concentration in the distribution system, measured as combined chlorine or chlorine dioxide, cannot be undetectable in more than 5 percent of the samples each month, for any two consecutive months that the system serves water to the public. Water in the distribution system with a heterotrophic bacteria concentration less than or equal to 500/ml, measured as heterotrophic plate count (HPC) is deemed to have a detectable disinfectant residual for purposes of determining compliance with this requirement. Thus, the value "V" in the following formula cannot exceed 5 percent in one month, for any two consecutive months.

$$V = ((c + d + e) / (a + b)) \times 100 \text{ where:}$$

a = number of instances where the residual disinfectant concentration is measured;

b = number of instances where the residual disinfectant

concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;

c = number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

d = number of instances where no residual disinfectant concentration is detected and where HPC is greater than 500/ml;

e = number of instances where the residual disinfectant concentration is not measured and HPC is greater than 500/ml.

(b) If the Director determines, based on site-specific considerations, that a system has no means for having a sample transported and analyzed for HPC by a certified laboratory under the requisite time and temperature conditions specified in Heterotrophic Plate Count (Pour Plate Method) as set forth in the latest edition of Standard Methods for the Examination of Water and Wastewater, 1985, American Public Health Association et al. (Method 907A in the 16th edition) and that the system is providing adequate disinfection in the distribution system, the requirements of R309-200-5(7)(a)(iii) do not apply.

(c) If a system utilizes a combination of sources, some surface water influenced (requiring filtration and disinfection treatment) and others deemed ground water (not requiring any treatment, even disinfection), the Director may, based on site-specific considerations, allow sampling for residual disinfectant or HPC at locations other than those specified by total coliform monitoring required by R309-210-5.

R309-200-6. Secondary Drinking Water Standards for Community, Non-Transient Non-Community and Transient Non-Community Water.

The Secondary Maximum Contaminant Levels for public water systems deals with substances which affect the aesthetic quality of drinking water. They are presented here as recommended limits or ranges and are not grounds for rejection. The taste of water may be unpleasant and the usefulness of the water may be impaired if these standards are significantly exceeded.

TABLE 200-7
SECONDARY INORGANIC CONTAMINANTS

Contaminant	Level
Aluminum	0.05 to 0.2 mg/L
Chloride	250 mg/L
Color	15 Color Units
Copper	1 mg/L
Corrosivity	Non-corrosive
Fluoride	2.0 mg/L (see Note below)
Foaming Agents	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Odor	3 Threshold Odor Number
pH	6.5-8.5
Silver	0.1 mg/L
Sulfate	250 mg/L (see Note below)
TDS	500 mg/L (see Note below)
Zinc	5 mg/L

Note: Maximum allowable Fluoride, TDS and Sulfate levels are given in the Primary Drinking Water Standards, R309-200-5(1). They are listed as secondary standards because levels in excess of these recommended levels will likely cause consumer complaint.

R309-200-7. Treatment Techniques and Unregulated Contaminants.

(1) The Board has determined that the minimum level of treatment as described in R309-525 and R309-530 herein or its equivalent is required for surface water sources and ground water contaminated by surface sources.

(2) For all public water systems which use surface water

or ground water under the direct influence of surface water, R309-200, 215, 505, 510, 520, 525 and 530 establish or extend treatment technique requirements in lieu of maximum contaminant levels for the following contaminants: *Giardia lamblia*, viruses, heterotrophic plate count bacteria, *Legionella*, *Cryptosporidium*, and turbidity. The treatment technique requirements consist of installing and properly operating water treatment processes which reliably achieve:

- (a) at least 99.9 percent (3-log) removal and/or inactivation of *Giardia lamblia* cysts between a point where the raw water is not subject to re-contamination by surface water runoff and a point downstream before or at the first customer;
 - (b) at least 99.99 percent (4-log) removal and/or inactivation of viruses between a point where the raw water is not subject to re-contamination by surface water runoff and a point downstream before or at the first customer.
 - (c) At least 99 percent (2-log) removal of *Cryptosporidium* between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer.
 - (d) Compliance with the profiling and benchmark requirements under the provisions of R309-215-14.
- (3) No MCLs are established herein for unregulated contaminants; viruses, protozoans and other chemical and biological substances. Some unregulated contaminants shall be monitored for in accordance with 40 CFR 141.40.

R309-200-8. Approved Laboratories.

- (1) For the purpose of determining compliance, samples may be considered only if they have been analyzed by the State of Utah primacy laboratory or a laboratory certified by the Utah State Health Laboratory. However, measurements for pH, temperature, turbidity and disinfectant residual, daily chlorite, TOC, UV254, DOC and SUVA may, under the direction of the direct responsible charge operator, be performed by any water supplier or their representative.
- (2) All samples shall be marked either: routine, repeat, check or investigative before submission of such samples to a certified lab. Routine, repeat, and check samples shall be considered compliance purposes samples.
- (3) All public water systems shall either: contract with a certified laboratory to have the laboratory send all compliance purposes sample results, with the exception of Lead/Copper data, to the Division of Drinking Water, or shall inform the Division of Drinking Water that they intend to forward all compliance purposes samples to the Division. Each public water system shall furnish the Division of Drinking Water a copy of the contract with their certified laboratory or inform the Division in writing of the public water system's intent to forward the data to the Division.
- (4) All sample results can be sent either electronically or in hard copy form.

KEY: drinking water, quality standards, regulated contaminants

September 4, 2009

Notice of Continuation March 13, 2015

19-4-104

R309. Environmental Quality, Drinking Water.
R309-205. Monitoring and Water Quality: Source Monitoring Requirements.

R309-205-1. Purpose.

The purpose of this rule is to outline the monitoring requirements for public water systems with regard to their water sources.

R309-205-2. Authority.

R309-205-3. Definitions.

R309-205-4. General.

R309-205-5. Inorganic Chemical Monitoring

(1) Monitoring Protocols and Compliance

Determinations

(2) Asbestos Source Monitoring

(3) Inorganic and Metals Monitoring

(4) Nitrate Monitoring

(5) Nitrite Monitoring.

R309-205-6. Organic Monitoring.

(1) Pesticide/PCBs/SOCs

(2) Volatile Organic Contaminant Monitoring

R309-205-7. Radiological Chemical Monitoring.

R309-205-8. Turbidity Monitoring.

R309-205-9. Microbiological Contaminants.

R309-205-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-205-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-205-4. General.

(1) All public water systems are required to monitor their water to determine if they comply with the requirements for water quality stated in R309-200. In exceptional circumstances the Director may modify the monitoring requirements given herein as is deemed appropriate.

(2) The Director may determine compliance or initiate compliance actions based upon analytical results and other information compiled by authorized representatives.

(3) If the water fails to meet minimum standards, then certain public notification procedures shall be carried out, as outlined in R309-220. Water suppliers shall also keep analytical records in their possession, for a required length of time, as outlined in R309-105-17.

(4) All samples shall be taken at each source or point of entry to the distribution system as specified herein for each contaminant or group of contaminants.

(5) For the purpose of determining compliance, samples may only be considered if they have been analyzed by the State of Utah primary laboratory or a laboratory certified by the Utah State Health Laboratory.

(6) Measurements for pH, temperature, turbidity and disinfectant residual may, under the direction of the direct responsible operator, be performed by any water supplier or their representative.

(7) All samples shall be marked either: routine, repeat, check or investigative before submission of such samples to a certified laboratory. Routine, repeat, and check samples shall be considered compliance purpose samples.

(8) All sample results can be sent to the Division of Drinking Water either electronically or in hard copy form.

(9) Unless otherwise required by the Director, the effective dates on which required monitoring shall be initiated are identical to the dates published in 40 CFR 141 on July 1,

2004 by the Office of the Federal Register.

(10) Exemptions from monitoring requirements shall only be granted in accordance with R309-105-5.

R309-205-5. Inorganic Contaminants.

Community, non-transient non-community, and transient non-community water systems shall conduct monitoring as specified to determine compliance with the maximum contaminant levels specified in R309-200-5 in accordance with this section.

(1) Monitoring shall be conducted as follows:

(a) Groundwater systems shall take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment (hereafter called a sampling point) beginning in the compliance period starting January 1, 1993. The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(b) Surface water systems shall take a minimum of one sample at every entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment (hereafter called a sampling point) beginning in the compliance period beginning January 1, 1993. The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant. (Note: For purposes of this paragraph, surface water systems include systems with a combination of surface and ground sources.)

(c) If a system draws water from more than one source and the sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

(d) The frequency of monitoring for asbestos shall be in accordance with R309-205-5(2); the frequency of monitoring for antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, sodium, sulfate, thallium, and total dissolved solids shall be in accordance with R309-205-5(3); the frequency of monitoring for nitrate shall be in accordance with R309-205-5(4); the frequency of monitoring for nitrite shall be in accordance with R309-205-5(5).

(e) Confirmation samples:

(i) Where the results of sampling for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, sulfate, thallium or total dissolved solids indicate an exceedance of the maximum contaminant level, the Director may require that one additional sample be collected as soon as possible after the initial sample was taken (but not to exceed two weeks) at the same sampling point.

(ii) Where nitrate or nitrite sampling results indicate an exceedance of the maximum contaminant level, the system shall take a confirmation sample within 24 hours of the system's receipt of notification of the analytical results of the first sample. Systems unable to comply with the 24-hour sampling requirement shall immediately notify the consumers in the area served by the public water system source in accordance with R309-220-5. Systems exercising this option shall take and analyze a confirmation sample within two weeks of notification of the analytical results of the first sample.

(iii) Procedures if the Secondary Standard for Fluoride is Exceeded Notification of State and/or Public.

If the result of an analysis indicates that the level of fluoride exceeds the Secondary Drinking Water Standard, the supplier of water shall give notice as required in R309-220-

11.

(iv) The results of the initial and confirmation sample(s) taken for any contaminant, shall be averaged. The resulting average shall be used to determine the system's compliance in accordance with paragraph (1)(g) of this section. The Director has the discretion to delete results of obvious sampling errors.

(f) The Director may require more frequent monitoring than specified in paragraphs (2), (3), (4) and (5) of this section or may require confirmation samples for positive and negative results. The Director may also require an appropriate treatment process.

(g) Compliance with R309-200-5(1) shall be determined based on the analytical result(s) obtained at each sampling point.

(i) For systems which are conducting monitoring at a frequency greater than annual, compliance with the maximum contaminant levels for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, sulfate, thallium and total dissolved solids is determined by a running annual average at each sampling point. If the average at any sampling point is greater than the MCL, then the system is out of compliance. If any one sample would cause the annual average to be exceeded, then the system is out of compliance immediately. Any sample below the method detection limit shall be calculated at zero for the purpose of determining the annual average. If a system fails to collect the required number of samples, compliance (average concentration) shall be based on the total number of samples collected.

(ii) For systems which are monitoring annually, or less frequently, the system is out of compliance with the maximum contaminant levels for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, sulfate, thallium and total dissolved solids if the level of a contaminant at any sampling point is greater than the MCL. If confirmation samples are required by the Director, the determination of compliance will be based on the annual average of the initial MCL exceedance and any Director required confirmation samples. If a system fails to collect the required number of samples, compliance (average concentration) shall be based on the total number of samples collected. If the average of the samples exceed the maximum contaminant levels then the water system shall provide public notice as required under R309-220.

(iii) Compliance with the maximum contaminant levels for nitrate and nitrite is determined based on one sample. If the levels of nitrate and/or nitrite exceed the MCLs in the initial sample, a confirmation sample is required in accordance with paragraph (1)(g)(ii) of this section, and compliance shall be determined based on the average of the initial and confirmation samples.

(iv) If a public water system has a distribution system separable from other parts of the distribution system with no interconnections, the Director may allow the system to give public notice to only the area served by that portion of the system which is out of compliance.

(h) Each public water system shall monitor at the time designated by the Director during each compliance period.

(2) The frequency of monitoring conducted to determine compliance with the maximum contaminant level for asbestos specified in R309-200-5(1) shall be conducted as follows:

(a) Each community and non-transient non-community water system is required to monitor for asbestos during the first three-year compliance period of each nine-year compliance cycle beginning in the compliance period starting January 1, 1993.

(b) If the system believes it is not vulnerable to asbestos contamination in its source water, it may apply to the Director

for a waiver of the monitoring requirement in paragraph (a) of this section. If the Director grants the waiver, the system is not required to monitor for asbestos.

(c) The Director may grant a waiver based on a consideration of the potential asbestos contamination of the water source.

(d) A waiver remains in effect until the completion of the three-year compliance period. Systems not receiving a waiver shall monitor in accordance with the provisions of paragraph (a) of this section.

(e) A system vulnerable to asbestos contamination due solely to source water shall monitor in accordance with the provision of R309-205-5(1).

(f) A system vulnerable to asbestos contamination due both to its source water supply and corrosion of asbestos-cement pipe as specified in R309-210-7 shall take one sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

(g) A system which exceeds the maximum contaminant levels as determined in R309-205-5(1)(g) shall monitor quarterly beginning in the next quarter after the violation occurred.

(h) The Director may decrease the quarterly monitoring requirement to the frequency specified in paragraph (a) of this section provided the Director has determined that the system is reliably and consistently below the maximum contaminant level. In no case can the Director make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface (or combined surface/ground) water system takes a minimum of four quarterly samples.

(i) If monitoring data collected after January 1, 1990 are generally consistent with the requirements of R309-205-5(2), then the Director may allow systems to use that data to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

(3) The frequency of monitoring conducted to determine compliance with the maximum contaminant levels in R309-200-5(1) for antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, sodium, sulfate, thallium and total dissolved solids shall be as follows:

(a) Each community and non-transient non-community groundwater system shall take one sample at each sampling point once every three years. Each community and non-transient non-community surface water system (or combined surface/ground) shall take one sample annually at each sampling point. Each transient non-community system shall take one sample for sulfate only at each sampling point once every three years for both groundwater and surface water systems.

(b) The system may apply to the Director for a waiver from the monitoring frequencies specified in paragraph (3)(a) of this section.

(c) A condition of the waiver shall require that a system shall take a minimum of one sample while the waiver is effective. The term during which the waiver is effective shall not exceed one compliance cycle (i.e., nine years).

(d) The Director may grant a waiver provided surface water systems have monitored annually for at least three years and groundwater systems have conducted a minimum of three rounds of monitoring. (At least one sample shall have been taken since January 1, 1990.) Both surface and groundwater systems shall demonstrate that all previous analytical results were less than the maximum contaminant level. Systems that use a new water source are not eligible for a waiver until three rounds of monitoring from the new source have been completed.

(e) In determining the appropriate reduced monitoring frequency, the Director shall consider:

(i) Reported concentrations from all previous monitoring;

(ii) The degree of variation in reported concentrations; and

(iii) Other factors which may affect contaminant concentrations such as changes in groundwater pumping rates, changes in the system's configuration, changes in the system's operating procedures, or changes in stream flows or characteristics.

(f) A decision by the Director to grant a waiver shall be made in writing and shall set forth the basis for the determination. The determination may be initiated by the Director or upon an application by the public water system. The public water system shall specify the basis for its request. The Director shall review and, where appropriate, revise its determination of the appropriate monitoring frequency when the system submits new monitoring data or when other data relevant to the system's appropriate monitoring frequency become available.

(g) Systems which exceed the maximum contaminant levels as calculated in R309-205-5(1)(g) of this section shall monitor quarterly beginning in the next quarter after the violation occurred.

(h) The Director may decrease the quarterly monitoring requirement to the frequencies specified in paragraphs (3)(a) and (b) of this section provided it has determined that the system is reliably and consistently below the maximum contaminant level. In no case can the Director make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface water system takes a minimum of four quarterly samples.

(4) All public water systems (community; non-transient non-community; and transient non-community systems) shall monitor to determine compliance with the maximum contaminant level for nitrate in R309-200-5(1).

(a) Community and non-transient non-community water systems served by groundwater systems shall monitor annually beginning January 1, 1993; systems served by surface water shall monitor quarterly beginning January 1, 1993.

(b) For community and non-transient non-community water systems, the repeat monitoring frequency for groundwater systems shall be quarterly for at least one year following any one sample in which the concentration is greater than or equal to 50 percent of the MCL. The Director may allow a groundwater system to reduce the sampling frequency to annually after four consecutive quarterly samples are reliably and consistently less than the MCL.

(c) For community and non-transient non-community water systems, the Director may allow a surface water system to reduce the sampling frequency to annually if all analytical results from four consecutive quarters are less than 50 percent of the MCL. A surface water system shall return to quarterly monitoring if any one sample is greater than or equal to 50 percent of the MCL.

(d) Each transient non-community water system shall monitor annually beginning January 1, 1993.

(e) After the initial round of quarterly sampling is completed, each community and non-transient non-community system which is monitoring annually shall take subsequent samples during the quarter(s) which previously resulted in the highest analytical result.

(5) All public water systems (community; non-transient non-community; and transient non-community systems) shall monitor to determine compliance with the maximum contaminant level for nitrite in R309-200-5(1).

(a) All public water systems shall take one sample at each sampling point in the compliance period beginning January 1, 1993 and ending December 31, 1995.

(b) After the initial sample, systems where an analytical result for nitrite is less than 50 percent of the MCL shall monitor at the frequency specified by the Director.

(c) For community, non-transient non-community, and transient non-community water systems, the repeat monitoring frequency for any water system shall be quarterly for at least one year following any one sample in which the concentration is greater than or equal to 50 percent of the MCL. The Director may allow a system to reduce the sampling frequency to annually after determining the system is reliably and consistently less than the MCL.

(d) Systems which are monitoring annually shall take each subsequent sample during the quarter(s) which previously resulted in the highest analytical result.

R309-205-6. Organic Contaminants.

For the purposes of R309-100 through R309-605, organic chemicals are divided into three categories: Pesticides/PCBs/SOCs, volatile organic contaminants (VOCs) and total trihalomethanes.

(1) Pesticides/PCBs/SOCs monitoring requirements.

Analysis of the contaminants listed in R309-200-5(2)(a) for the purposes of determining compliance with the maximum contaminant level shall be conducted as follows:

(a) Groundwater systems shall take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment (hereafter called a sampling point). Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(b) Surface water systems shall take a minimum of one sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment (hereafter called a sampling point). Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant. (Note: For purposes of this paragraph, surface water systems include systems with a combination of surface and ground sources.)

(c) If the system draws water from more than one source and the sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water representative of all sources is being used).

(d) Monitoring frequency:

(i) Each community and non-transient non-community water system shall take four consecutive quarterly samples for each contaminant listed in R309-200-5(2)(a) during each compliance period beginning with the compliance period starting January 1, 1993. For systems serving less than 3,300, this requirement may be reduced to one sample if the sample is taken prior to October 1, 1993.

(ii) Systems serving more than 3,300 persons which do not detect a contaminant in the initial compliance period, may reduce the sampling frequency to a minimum of two quarterly samples in one year during each repeat compliance period.

(iii) Systems serving less than or equal to 3,300 persons which do not detect a contaminant in the initial compliance period may reduce the sampling frequency to a minimum of one sample during each repeat compliance period.

(e) Each community and non-transient non-community water system may apply to the Director for a waiver from the requirement of paragraph (d) of this section. A system shall reapply for a waiver for each compliance period.

(f) The Director may grant: a use waiver, a susceptibility waiver or a reliably and consistently waiver. The use and susceptibility waivers shall be granted in accordance with R309-600-16. The reliably and consistently waiver shall be

based on a minimum of three rounds of monitoring where the results of analysis for all constituents show that no contaminant is detected, or that the detected amount of a contaminant is less than half the MCL.

(i) If a use waiver is granted no monitoring for pesticides/PCBs/SOCs will be required, provided documentation consistent with R309-600-16 and justifying the continuance of a use waiver is submitted to the Director at least every six years.

(ii) If a susceptibility waiver or a reliably and consistently waiver is granted, monitoring for pesticides/PCBs/SOCs shall be performed as listed below, provided documentation consistent with R309-600-16 and justifying the continuance of a susceptibility waiver is submitted to the Director at least every six years or in the case of a reliably and consistently waiver that the analytical results justify the continuance of the reliably and consistently waiver.

(A) For community and non-transient non community systems serving populations greater than 3,300 people, samples for pesticides/PCBs/SOCs shall be taken in two consecutive quarters every three years.

(B) For community and non-transient non community systems serving populations less than 3,301 people, samples for pesticides/PCBs/SOCs shall be taken every three years.

(g) If an organic contaminant listed in R309-200-5(2)(a) is detected in any sample, then:

(i) Each system shall monitor quarterly at each sampling point which resulted in a detection.

(ii) The Director may decrease the quarterly monitoring requirement specified in paragraph (g)(i) of this section provided it has determined that the system is reliably and consistently below the maximum contaminant level. In no case shall the Director make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface water system takes a minimum of four quarterly samples.

(iii) After the Director determines the system is reliably and consistently below the maximum contaminant level the Director may allow the system to monitor annually. Systems which monitor annually shall monitor during the quarter that previously yielded the highest analytical result.

(iv) Systems which have 3 consecutive annual samples with no detection of a contaminant may apply to the Director for a waiver as specified in paragraph (f) of this section.

(v) If monitoring results in detection of one or more of certain related contaminants (aldicarb, aldicarb sulfone, aldicarb sulfoxide and heptachlor, heptachlor epoxide), then subsequent monitoring shall analyze for all related contaminants.

(h) Systems which violate the maximum contaminant levels of R309-200-5(2)(a) as determined by paragraph (j) of this section shall monitor quarterly. After a minimum of four quarterly samples show the system is in compliance and the Director determines the system is reliably and consistently below the MCL, as specified in paragraph (j) of this section, the system shall monitor at the frequency specified in paragraph (g)(iii) of this section.

(i) The Director may require a confirmation sample for positive or negative results. If a confirmation sample is required by the Director, the result shall be averaged with the first sampling result and the average used for the compliance determination as specified by paragraph (j) of this section. The Director has the discretion to delete results of obvious sampling errors from this calculation.

(j) Compliance with the maximum contaminant levels in R309-200-5(2)(a) shall be determined based on the analytical results obtained at each sampling point. If one sampling point is in violation of the MCL, the system is in violation of the MCL.

(i) For systems monitoring more than once per year, compliance with the MCL is determined by a running annual average at each sampling point.

(ii) Systems monitoring annually or less frequently whose sample result exceeds the method detection level as defined in R309-200-4(3) must begin quarterly sampling. The system shall not be considered in violation of the MCL until it has completed one year of quarterly sampling.

(iii) If any sample result will cause the running annual average to exceed the MCL at any sampling point, the system is out of compliance with the MCL immediately.

(iv) If a system fails to collect the required number of samples, compliance shall be based on the total number of samples collected.

(v) If a sample result is less than the method detection limit, zero shall be used to calculate the annual average.

(vi) If a public water system has a distribution system separable from other parts of the distribution system with no interconnections, the Director may allow the system to give public notice to only that portion of the system which is out of compliance.

(k) If monitoring data collected after January 1, 1990, are generally consistent with the other requirements of this section, then the Director may allow systems to use that data to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

(l) The Director may increase the required monitoring frequency, where necessary, to detect variations within the system (e.g., fluctuations in concentration due to seasonal use, changes in water source).

(m) The Director has the authority to determine compliance or initiate enforcement action based upon analytical results and other information compiled by their sanctioned representatives and agencies.

(n) Each public water system shall monitor at the time designated by the Director within each compliance period.

(2) Volatile organic contaminants monitoring requirements.

Analysis of the contaminants listed in R309-200-5(2)(b) for the purpose of determining compliance with the maximum contaminant level shall be conducted as follows:

(a) Groundwater systems shall take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment (hereafter called a sampling point). Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant or within the distribution system.

(b) Surface water systems (or combined surface/ground) shall take a minimum of one sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment (hereafter called a sampling point). Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system.

(c) If the system draws water from more than one source and the sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water representative of all sources is being used).

(d) Each community and non-transient non-community water system shall initially take four consecutive quarterly samples for each contaminant listed in R309-200-5(2)(b), Table 200-3, numbers 2 through 21 during each compliance period beginning in the initial compliance period. For systems serving a population of less than 3,300, this requirement may be reduced to one sample if the sample is taken prior to October 1, 1993.

(e) If the initial monitoring for contaminants listed in R309-200-5(2)(b), Table 200-3, numbers 2 through 21 as allowed in paragraph (n) has been completed by December 31, 1992, and the system did not detect any contaminant listed in R309-200-5(2)(b), then each ground and surface water system shall take one sample annually beginning with the initial compliance period.

(f) After a minimum of three years of annual sampling, the Director may allow groundwater systems with no previous detection of any contaminant listed in R309-200-5(2)(b) to take one sample during each compliance period.

(g) Each community and non-transient non-community water system which does not detect a contaminant listed in R309-200-5(2)(b) may apply to the Director for a waiver from the requirements of paragraph (d) and (e) of this section after completing the initial monitoring. (For the purposes of this section, detection is defined as greater than or equal to 0.0005 mg/L.) A waiver shall be effective for no more than six years (two compliance periods). The Director may also issue waivers for the initial round of monitoring for 1,2,4-trichlorobenzene.

(h) The Director may grant: a use waiver, a susceptibility waiver or a reliably and consistently waiver. The use and susceptibility waivers shall be granted in accordance with R309-600-16. The reliably and consistently waiver shall be based on a minimum of three rounds of monitoring where the results of analysis for all constituents show that no contaminant is detected, or that the detected amount of a contaminant is less than half the MCL. To maintain a use waiver or a susceptibility waiver a system shall submit documentation consistent with R309-600-16 which justifies the continuance of a use or a susceptibility waiver at least every six years. For a reliably and consistently waiver, the analytical results for all constituents of all samples shall justify its continuance. If a waiver is granted, monitoring for VOCs will be required at least every six years.

(i) As a condition of the waiver a groundwater system shall take one sample at each sampling point during the time the waiver is effective (i.e., one sample during two compliance periods or six years) and update its source protection plan in accordance with R309-600.

(j) If a contaminant listed in R309-200-5(2)(b), Table 200-3, numbers 2 through 21 is detected at a level exceeding 0.0005 mg/L in any sample, then:

(i) The system shall monitor quarterly at each sampling point which resulted in a detection.

(ii) The Director may decrease the quarterly monitoring requirement specified in paragraph (j)(i) of this section provided it has determined that the system is reliably and consistently below the maximum contaminant level. In no case shall the Director make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface water system takes a minimum of four quarterly samples.

(iii) If the Director determines that the system is reliably and consistently below the MCL, the Director may allow the system to monitor annually. Systems which monitor annually shall monitor during the quarter(s) which previously yielded the highest analytical result.

(iv) Systems which have three consecutive annual samples with no detection of a contaminant may apply to the Director for a waiver as specified in paragraph (f) of this section.

(v) Groundwater systems which have detected one or more of the following two-carbon organic compounds: trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, or 1,1-dichloroethylene shall monitor quarterly for vinyl chloride. A vinyl chloride sample shall be

taken at each sampling point at which one or more of the two-carbon organic compounds were detected. If the results of the first analysis do not detect vinyl chloride, the Director may reduce the quarterly monitoring frequency of vinyl chloride monitoring to one sample during each compliance period. Surface water systems are required to monitor for vinyl chloride as specified by the Director.

(k) Systems which violate the maximum contaminant levels as required in R309-200-5(2)(b) as determined by paragraph (m) of this section shall monitor quarterly. After a minimum of four consecutive quarterly samples shows the system is in compliance as specified in paragraph (m) of this section, and the Director determines that the system is reliably and consistently below the maximum contaminant level, the system may monitor at the frequency and time specified in paragraph (j)(iii) of this section.

(l) The Director may require a confirmation sample for positive or negative results. If a confirmation sample is required by the Director, the result shall be averaged with the first sampling result and the average is used for the compliance determination as specified by paragraph (m) of this section. The Director has the discretion to delete results of obvious sampling errors from this calculation.

(m) Compliance with R309-200-5(2)(b) shall be determined based on the analytical results obtained at each sampling point. If one sampling point is in violation of a MCL, the system is in violation of the MCL.

(i) For systems monitoring more than once per year, compliance with the MCL is determined by a running annual average at each sampling point.

(ii) Systems monitoring annually or less frequently whose sample result exceeds the MCL must begin quarterly sampling. The system will not be considered in violation of the MCL until it has completed one year of quarterly sampling.

(iii) If any sample result will cause the running annual average to exceed the MCL at any sampling point, the system is out of compliance with the MCL immediately.

(iv) If a system fails to collect the required number of samples, compliance shall be based on the total number of samples collected.

(v) If a sample result is less than the method detection limit, zero shall be used to calculate the annual average.

(vi) If a public water system has a distribution system separable from other parts of the distribution system with no interconnections, the Director may allow the system to give public notice to only that area served by that portion of the system which is out of compliance.

(n) The Director may allow the use of monitoring data collected after January 1, 1988 for purposes of monitoring compliance providing that the data is generally consistent with the other requirements in this section, the Director may use that data (i.e., a single sample rather than four quarterly samples) to satisfy the initial monitoring requirement of paragraph (d) of this section. Systems which use grandfathered samples and did not detect any contaminant listed in R309-200-5(2)(b) shall begin monitoring annually in accordance with (e) of this section.

(o) The Director may increase required monitoring where necessary to detect variations within the system.

(p) Each public water system shall monitor at the time designated by the Director within each compliance period.

R309-205-7. Radiological Contaminants.

(1) Monitoring and compliance requirements for gross alpha particle activity, radium-226, radium-228, and uranium.

(a) Community water systems (CWSs) shall conduct initial monitoring to determine compliance with R309-200-5(4)(b), (c), and (e) by December 31, 2007. For the purposes

of monitoring for gross alpha particle activity, radium-226, radium-228, uranium, and beta particle and photon radioactivity in drinking water, the following detection limits are established: Gross alpha particle activity - 3 pCi/L, Radium 226 - 1 pCi/L, Radium 228 - 1 pCi/L, and Uranium - reserved.

(i) Applicability and sampling location for existing community water systems or sources. All existing CWSs using ground water, surface water or systems using both ground and surface water (for the purpose of this section hereafter referred to as systems) shall sample at every entry point to the distribution system that is representative of all sources being used (hereafter called a sampling point) under normal operating conditions. The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or the Director has designated a distribution system location, in accordance with paragraph (1)(b)(ii)(C) of this section.

(ii) Applicability and sampling location for new community water systems or sources. All new CWSs or CWSs that use a new source of water shall begin to conduct initial monitoring for the new source within the first quarter after initiating use of the source. CWSs shall conduct more frequent monitoring when ordered by the Director in the event of possible contamination or when changes in the distribution system or treatment processes occur which may increase the concentration of radioactivity in finished water.

(b) Initial monitoring: Systems shall conduct initial monitoring for gross alpha particle activity, radium-226, radium-228, and uranium as follows:

(i) Systems without acceptable historical data, as defined below, shall collect four consecutive quarterly samples at all sampling points before December 31, 2007.

(ii) Grandfathering of data: The Director may allow historical monitoring data collected at a sampling point to satisfy the initial monitoring requirements for that sampling point, for the following situations.

(A) To satisfy initial monitoring requirements, a community water system having only one entry point to the distribution system may use the monitoring data from the last compliance monitoring period that began between June 2000 and December 8, 2003.

(B) To satisfy initial monitoring requirements, a community water system with multiple entry points and having appropriate historical monitoring data for each entry point to the distribution system may use the monitoring data from the last compliance monitoring period that began between June 2000 and December 8, 2003.

(C) To satisfy initial monitoring requirements, a community water system with appropriate historical data for a representative point in the distribution system may use the monitoring data from the last compliance monitoring period that began between June 2000 and December 8, 2003, provided that the Director finds that the historical data satisfactorily demonstrate that each entry point to the distribution system is expected to be in compliance based upon the historical data and reasonable assumptions about the variability of contaminant levels between entry points. The Director shall make a written finding indicating how the data conforms to these requirements.

(iii) For gross alpha particle activity, uranium, radium-226, and radium-228 monitoring, the Director may waive the final two quarters of initial monitoring for a sampling point if the results of the samples from the previous two quarters are below the detection limit.

(iv) If the average of the initial monitoring results for a sampling point is above the MCL, the system shall collect and analyze quarterly samples at that sampling point until the system has results from four consecutive quarters that are at or

below the MCL, unless the system enters into another schedule as part of a formal compliance agreement with the Director.

(c) Reduced monitoring: The Director may allow community water systems to reduce the future frequency of monitoring from once every three years to once every six or nine years at each sampling point, based on the following criteria.

(i) If the average of the initial monitoring results for each contaminant (i.e., gross alpha particle activity, uranium, radium-226, or radium-228) is below the detection limit specified in paragraph (1)(a) of this section, the system shall collect and analyze for that contaminant using at least one sample at that sampling point every nine years.

(ii) For gross alpha particle activity and uranium, if the average of the initial monitoring results for each contaminant is at or above the detection limit but at or below 1/2 the MCL, the system shall collect and analyze for that contaminant using at least one sample at that sampling point every six years. For combined radium-226 and radium-228, the analytical results shall be combined. If the average of the combined initial monitoring results for radium-226 and radium-228 is at or above the detection limit but at or below 1/2 the MCL, the system shall collect and analyze for that contaminant using at least one sample at that sampling point every six years.

(iii) For gross alpha particle activity and uranium, if the average of the initial monitoring results for each contaminant is above 1/2 the MCL but at or below the MCL, the system shall collect and analyze at least one sample at that sampling point every three years. For combined radium-226 and radium-228, the analytical results shall be combined. If the average of the combined initial monitoring results for radium-226 and radium-228 is above 1/2 the MCL but at or below the MCL, the system shall collect and analyze at least one sample at that sampling point every three years.

(iv) Systems shall use the samples collected during the reduced monitoring period to determine the monitoring frequency for subsequent monitoring periods (e.g., if a system's sampling point is on a nine year monitoring period, and the sample result is above 1/2 MCL, then the next monitoring period for that sampling point is three years).

(v) If a system has a monitoring result that exceeds the MCL while on reduced monitoring, the system shall collect and analyze quarterly samples at that sampling point until the system has results from four consecutive quarters that are below the MCL, unless the system enters into another schedule as part of a formal compliance agreement with the Director.

(d) Compositing: To fulfill quarterly monitoring requirements for gross alpha particle activity, radium-226, radium-228, or uranium, a system may composite up to four consecutive quarterly samples from a single entry point if analysis is done within a year of the first sample. The Director will treat analytical results from the composited as the average analytical result to determine compliance with the MCLs and the future monitoring frequency. If the analytical result from the composited sample is greater than 1/2 MCL, the Director may direct the system to take additional quarterly samples before allowing the system to sample under a reduced monitoring schedule.

(e) A gross alpha particle activity measurement may be substituted for the required radium-226 measurement provided that the measured gross alpha particle activity does not exceed 5 pCi/l. A gross alpha particle activity measurement may be substituted for the required uranium measurement provided that the measured gross alpha particle activity does not exceed 15 pCi/l.

(f) The gross alpha measurement shall have a

confidence interval of 95% ($1.65s$, where s is the standard deviation of the net counting rate of the sample) for radium-226 and uranium. When a system uses a gross alpha particle activity measurement in lieu of a radium-226 and/or uranium measurement, the gross alpha particle activity analytical result will be used to determine the future monitoring frequency for radium-226 and/or uranium. If the gross alpha particle activity result is less than detection, $1/2$ the detection limit will be used to determine compliance and the future monitoring frequency.

(2) Monitoring and compliance requirements for beta particle and photon radioactivity. To determine compliance with the maximum contaminant levels in R309-200-5(4)(d) for beta particle and photon radioactivity, a system shall monitor at a frequency as follows:

(a) Community water systems (both surface and ground water) designated by the Director as vulnerable shall sample for beta particle and photon radioactivity. Systems shall collect quarterly samples for beta emitters and annual samples for tritium and strontium-90 at each entry point to the distribution system (hereafter called a sampling point), beginning within one quarter after being notified by the Director. Systems already designated by the Director shall continue to sample until the Director reviews and either reaffirms or removes the designation. The following detection limits are established: Tritium - 1,000 pCi/l; Strontium-89 - 10 pCi/l; Strontium-90 - 2 pCi/l; Iodine-131 - 1 pCi/l; Cesium-134 - 10 pCi/l; Gross beta - 4 pCi/l; and other radionuclides ($1/10$) of the applicable limit.

(i) If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity at a sampling point has a running annual average (computed quarterly) less than or equal to 50 pCi/L (screening level), the Director may reduce the frequency of monitoring at that sampling point to once every 3 years. Systems shall collect all samples required in paragraph (2)(a) of this section during the reduced monitoring period.

(ii) For systems in the vicinity of a nuclear facility, the Director may allow the CWS to utilize environmental surveillance data collected by the nuclear facility in lieu of monitoring at the system's entry point(s), where the Director determines if such data is applicable to a particular water system. In the event that there is a release from a nuclear facility, systems which are using surveillance data shall begin monitoring at the community water system's entry point(s) in accordance with paragraph (2)(a) of this section.

(b) Community water systems (both surface and ground water) designated by the Director as utilizing waters contaminated by effluents from nuclear facilities shall sample for beta particle and photon radioactivity. Systems shall collect quarterly samples for beta emitters and iodine-131 and annual samples for tritium and strontium-90 at each entry point to the distribution system (hereafter called a sampling point), beginning within one quarter after being notified by the Director. Systems already designated by the Director as systems using waters contaminated by effluents from nuclear facilities shall continue to sample until the Director reviews and either reaffirms or removes the designation.

(i) Quarterly monitoring for gross beta particle activity shall be based on the analysis of monthly samples or the analysis of a composite of three monthly samples. The former is recommended.

(ii) For iodine-131, a composite of five consecutive daily samples shall be analyzed once each quarter. As ordered by the Director, more frequent monitoring shall be conducted when iodine-131 is identified in the finished water.

(iii) Annual monitoring for strontium-90 and tritium shall be conducted by means of the analysis of a composite of four consecutive quarterly samples or analysis of four

quarterly samples. The latter procedure is recommended.

(iv) If the gross beta particle activity beta minus the naturally occurring potassium-40 beta particle activity at a sampling point has a running annual average (computed quarterly) less than or equal to 15 pCi/L, the Director may reduce the frequency of monitoring at that sampling point to every 3 years. Systems shall collect all samples required in paragraph (2)(b) of this section during the reduced monitoring period.

(v) For systems in the vicinity of a nuclear facility, the Director may allow the CWS to utilize environmental surveillance data collected by the nuclear facility in lieu of monitoring at the system's entry point(s), where the Director determines if such data is applicable to a particular water system. In the event that there is a release from a nuclear facility, systems which are using surveillance data shall begin monitoring at the community water system's entry point(s) in accordance with paragraph (2)(b) of this section.

(c) Community water systems designated by the Director to monitor for beta particle and photon radioactivity can not apply to the Director for a waiver from the monitoring frequencies specified in paragraph (2)(a) or (2)(b) of this section.

(d) Community water systems may analyze for naturally occurring potassium-40 beta particle activity from the same or equivalent sample used for the gross beta particle activity analysis. Systems are allowed to subtract the potassium-40 beta particle activity value from the total gross beta particle activity value to determine if the screening level is exceeded. The potassium-40 beta particle activity shall be calculated by multiplying elemental potassium concentrations (in mg/L) by a factor of 0.82.

(e) If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity exceeds the screening level, an analysis of the sample shall be performed to identify the major radioactive constituents present in the sample and the appropriate doses shall be calculated and summed to determine compliance with R309-200-5(4)(d)(i), using the formula in R309-200-5(4)(d)(ii). Doses shall also be calculated and combined for measured levels of tritium and strontium to determine compliance.

(f) Systems shall monitor monthly at the sampling point(s) which exceed the maximum contaminant level in R309-200-5(4)(d) beginning the month after the exceedance occurs. Systems shall continue monthly monitoring until the system has established, by a rolling average of 3 monthly samples, that the MCL is being met. Systems who establish that the MCL is being met shall return to quarterly monitoring until they meet the requirements set forth in paragraph (2)(a)(ii) or (2)(b)(i) of this section.

(3) General monitoring and compliance requirements for radionuclides.

(a) The Director may require more frequent monitoring than specified in paragraphs (1) and (2) of this section, or may require confirmation samples at its discretion. The results of the initial and confirmation samples will be averaged for use in compliance determinations.

(b) Each public water system shall monitor at the time designated by the Director during each compliance period.

(c) Compliance: Compliance with R309-200-5(4) (b) through (e) will be determined based on the analytical result(s) obtained at each sampling point. If one sampling point is in violation of an MCL, the system is in violation of the MCL.

(i) For systems monitoring more than once per year, compliance with the MCL is determined by a running annual average at each sampling point. If the average of any sampling point is greater than the MCL, then the system is out of compliance with the MCL.

(ii) For systems monitoring more than once per year, if any sample result will cause the running average to exceed the MCL at any sample point, the system is out of compliance with the MCL immediately.

(iii) Systems shall include all samples taken and analyzed under the provisions of this section in determining compliance, even if that number is greater than the minimum required.

(iv) If a system does not collect all required samples when compliance is based on a running annual average of quarterly samples, compliance will be based on the running average of the samples collected.

(v) If a sample result is less than the detection limit, zero will be used to calculate the annual average, unless a gross alpha particle activity is being used in lieu of radium-226 and/or uranium. If the gross alpha particle activity result is less than detection, 1/2 the detection limit will be used to calculate the annual average.

(d) The Director has the discretion to delete results of obvious sampling or analytic errors.

(e) If the MCL for radioactivity set forth in R309-200-5(4)(b) through (e) is exceeded, the operator of a community water system shall give notice to the Director pursuant to R309-105-16 and to the public as required by R309-220.

(f) To judge compliance with the maximum contaminant levels listed in R309-200-5(4), averages of data shall be used and shall be rounded to the same number of significant figures as the maximum contaminant level for the substance in question.

R309-205-8. Turbidity.

(1) Routine Monitoring Requirements for Public Water Systems utilizing Ground Water Sources

The frequency of required turbidity monitoring or the lack of any required monitoring listed below may be increased or changed by the Director. Monitoring and reporting of water characteristics such as turbidity, conductivity, pH, and temperature of ground water sources and nearby surface water sources may be required so as to provide sufficient information on water characteristics so that the Director may classify existing ground water sources as required by R309-505-7(1)(a)(i)(A).

(a) All community water systems shall monitor ground water sources for turbidity once every three years.

(b) Non-transient non-community water systems are not required to monitor ground water sources for turbidity unless so ordered by the Director.

(c) Transient non-community water systems are not required to monitor ground water sources for turbidity unless so ordered by the Director.

(d) Samples may be taken from a representative location in the distribution system. However, the Director may require that samples be collected from each individual source.

(2) Procedures if Ground Water Source Turbidity Limit is Exceeded

If the result of an analysis of water from a ground water source or combination of ground water sources indicates that the turbidity limit of 5 NTUs is exceeded, the system shall collect three additional analyses at the same sampling point within one month. When the average of these four analyses (rounded to the same number of significant figures as the limit) exceeds the maximum turbidity limit, the system shall give public notice as required in R309-220. Where the raw water turbidity of developed spring or well water is in excess of 5 NTU, as measured by the average of the four samples, the spring or well is subject to re-classification by the Director and it may be necessary that the raw water receive complete treatment as described in R309-525 or R309-530 of these rules or its equivalent as approved by the Director.

Monitoring after public notification shall be at a frequency and duration designated by the Director.

(3) Turbidity monitoring requirements for surface water and ground water sources under the direct influence of surface water are specified in R309-215-9.

R309-205-9. Microbiological Contaminants.

(1) Sources may be required to monitor for microbial contaminants elsewhere in these rules. For example see R309-215-16(1)(a)(ii) and R309-215-16(2).

KEY: drinking water, source monitoring, compliance determinations

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Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.
R309-210. Monitoring and Water Quality: Distribution System Monitoring Requirements.

R309-210-1. Purpose.

The purpose of this rule is to outline the monitoring requirements for public water systems with regard to their distribution systems.

R309-210-2. Authority.

R309-210-3. Definitions.

R309-210-4. General distribution system monitoring requirements.

R309-210-5. Microbiological Monitoring.

R309-210-6. Lead and Copper Monitoring.

R309-210-7. Asbestos Distribution System Monitoring.

R309-210-8. Disinfection Byproducts - Stage 1

Requirements.

R309-210-9. Disinfection Byproducts - Initial Distribution System Evaluations (IDSE).

R309-210-10. Disinfection Byproducts - Stage 2 Requirements.

R309-210-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-210-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-210-4. General.

(1) All public water systems are required to monitor their water to determine if they comply with the requirements for water quality stated in R309-200. In exceptional circumstances the Director may modify the monitoring requirements given herein as is deemed appropriate.

(2) The Director may determine compliance or initiate compliance actions based upon analytical results and other information compiled by authorized representatives.

(3) If the water fails to meet minimum standards, then certain public notification procedures must be carried out, as outlined in R309-220. Water suppliers must also keep analytical records in their possession, for a required length of time, as outlined in R309-105-17.

(4) All samples shall be taken at representative sites as specified herein for each contaminant or group of contaminants.

(5) For the purpose of determining compliance, samples may only be considered if they have been analyzed by the State of Utah primacy laboratory or a laboratory certified by the Utah State Health Laboratory.

(6) Measurements for pH, temperature, turbidity and disinfectant residual may, under the direction of the direct responsible operator, be performed by any water supplier or their representative.

(7) All samples must be marked either: routine, repeat, check or investigative before submission of such samples to a certified laboratory. Routine, repeat, and check samples shall be considered compliance purpose samples.

(8) All sample results can be sent to the Division of Drinking Water either electronically or in hard copy form.

(9) Lead and Copper data must be submitted to the Division of Drinking Water using forms provided by the Division.

(10) Unless otherwise required by the Director, the effective dates on which required monitoring shall be initiated are identical to the dates published in 40 CFR 141 on July 1,

2001 by the Office of the Federal Register.

(11) Exemptions from monitoring requirements shall only be granted in accordance with R309-105-5.

R309-210-5. Microbiological Monitoring.

(1) Routine Microbiological Monitoring Requirements Applicable to all public water systems (community, non-transient non-community and transient non-community).

(a) Community water systems shall monitor for total coliforms at a frequency based on the population served, as follows:

TABLE 210-1
TOTAL COLIFORM MONITORING FREQUENCY
FOR PUBLIC WATER SYSTEMS

Population served	Minimum number of samples per month
25 to 1,000	1
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120
220,001 to 320,000	150
320,001 to 450,000	180
450,001 to 600,000	210
600,001 to 780,000	240
780,001 to 970,000	270
970,001 to 1,230,000	300
1,230,001 to 1,520,000	330
1,520,001 to 1,850,000	360
1,850,001 to 2,270,000	390
2,270,001 to 3,020,000	420
3,020,001 to 3,960,000	450
3,960,001 or more	480

The 25 - 1,000 population figure includes public water systems which have at least 15 service connections, but serve fewer than 25 persons.

(b) Non-transient non-community water systems shall monitor for total coliforms as follows:

(i) A system using only ground water (except ground water under the direct influence of surface water) and serving 1,000 or fewer shall monitor each calendar quarter that the system provides water to the public.

(ii) A system using only ground water (except ground water under the direct influence of surface water) and serving more than 1,000 persons during any month shall monitor at the same frequency as a like-sized community water system, as specified in Table 210-1. The Director may reduce the monitoring frequency for any month the system serves 1,000 persons or fewer. In no case may the required monitoring be reduced to less than once per calendar quarter.

(iii) A system using surface water, in total or in part, shall monitor at the same frequency as a like-sized community water system, as specified in Table 210-1.

(iv) A system using ground water under the direct influence of surface water shall monitor at the same frequency as a like-sized community water system, as specified in Table 210-1. The system shall begin monitoring at this frequency

beginning six months after the Director determines that the ground water is under the direct influence of surface water.

(c) Non-community water systems shall monitor for total coliforms as specified in R309-210-5(1)(b).

(d) The samples shall be collected at points which are representative of water throughout the distribution system according to a written sampling plan. This plan is subject to the approval of the Director.

(e) A public water system shall collect samples at regular time intervals throughout the month, except that a system which uses only ground water (except ground water under the direct influence of surface water) and serves 4,900 persons or fewer, may collect all required samples on a single day if they are taken from different sites.

(f) A public water system that uses inadequately treated surface water or inadequately treated ground water under the direct influence of surface water shall collect and analyze for total coliforms at least one sample each day the turbidity level of the source water exceeds 1 NTU. This sample shall be collected near the first service connection from the source. The system shall collect the sample within 24 hours of the time when the turbidity level was first exceeded. The sample shall be analyzed within 30 hours of collection. Sample results from this coliform monitoring shall be included in determining total coliform compliance for that month. The Director may extend the 24 hour limitation if the system has a logistical problem that is beyond the system's control. In the case of an extension the Director shall specify how much time the system has to collect the sample.

(2) Procedures if a Routine Sample is Total Coliform-Positive

(a) Repeat sampling -

The water system shall collect a set of repeat samples within 24 hours of being notified of the total coliform-positive sample result. The number of repeat samples required to be taken is specified in Table 210-2. The Director may extend the 24 hour limitation if the system has a logistical problem that is beyond its control. In the case of an extension the Director shall specify how much time the system has to collect the repeat samples.

TABLE 210-2
REPEAT AND ADDITIONAL SAMPLE MONITORING FREQUENCY

Population Served by the system	# Routine Samples per month	# Repeats for each Total-Coliform Positive sample Within 24 hours	# Samples in ADDITION to the Routine samples the following month
25-1000/See Note 1 below	1	4	4
1000-2500	2	3	3
2501-3300	3	3	2
3301-4100	4	3	1
greater than 4100 samples	5 or more	3	No additional required. Refer to Table 210-1 for # of Routine samples

NOTE 1: The population category 25 - 1000 includes all non-transient non-community and non-community water systems. Non-transient non-community and non-community systems are only required to sample once per calendar quarter on a routine basis for those quarters the system is in operation.

Repeat and Additional Routine samples are only required if a Routine Sample is Total Coliform-Positive.

(b) Repeat sampling locations -

The system shall collect the repeat samples from the following locations:

- (i) One from the original sample site;
- (ii) One within 5 service connections upstream;
- (iii) One within 5 service connections downstream;

(iv) If required, one from any site mentioned above.

If a total coliform-positive sample is at the end of the distribution system, or next to the end of the distribution system, the Director may waive the requirement to collect at least one repeat sample upstream or downstream of the original sampling site.

(c) The system shall collect all repeat samples on the same day, except that the Director may allow a system with a single service connection to collect the required set of repeat samples on consecutive days.

(d) Additional repeat samples - If one or more repeat samples in a set is total coliform-positive, the system shall collect an additional set of repeat samples as specified in (a), (b) and (c) of this subsection. The additional repeat samples shall be collected within 24 hours of being notified of the positive result, unless the Director extends the time limit because of a logistical problem. The system shall repeat this process until either total coliforms are not detected in one complete set of repeat samples or the system determines that the total coliform MCL has been exceeded and notifies the Director and begins the required public notification.

(e) If a system collecting fewer than five routine samples per month has one or more total coliform-positive samples and the Director does not invalidate the sample under R309-210-5(4), it shall collect at least five routine samples during the next month the system provides water to the public. Refer to Table 210-2 for the number of additional samples required.

(i) The Director may waive the requirement to collect five routine samples the next month the system provides water to the public if the Director has determined why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. In this case:

(A) The Director shall document this decision in writing; and

(B) The Director or his representative shall sign the document; and

(C) The Director will make the document available to the EPA and the public.

(ii) The Director cannot waive the additional samples in the following month solely because all repeat samples are total coliform-negative.

(iii) If the additional samples in the following month are waived, a system shall still take the minimum number of routine samples required in Table 210-1 of R309-210-5(1) before the end of the next month and use it to determine compliance with the total coliform MCL.

(f) Samples to be included in calculations - Results of all routine and repeat samples not invalidated in writing by the Director shall be included in determining compliance with the total coliform MCL.

(g) Samples not to be included in calculations - Special purpose and investigative samples, such as those taken to determine the efficiency of disinfection practices following such operations as pipe replacement or repair, may not be used to determine compliance with the MCL for total coliforms. These samples shall be identified as special purpose or investigative at the time of collection.

(3) Response to violation

(a) A public water system which has exceeded the MCL for total coliforms as specified in R309-200-5(6) shall report the violation to the Director no later than the end of the next business day after it learns of the violation, and notify the public in accordance with R309-220.

(b) A public water system which has failed to comply with a coliform monitoring requirement shall report the monitoring violation to the Director within ten days after the

system discovers the violation and notify the public in accordance with R309-220.

(4) Invalidation of Total Coliform-Positive Samples

An invalidated total coliform-positive sample does not count towards meeting the minimum monitoring requirements of R309-210-5(1) and R309-210-5(2). A total coliform-positive sample may not be invalidated solely on the basis of all repeat samples being total coliform-negative.

(a) The Director may invalidate a total coliform-positive sample only if one of the following conditions are met:

(i) The laboratory establishes that improper sample analysis caused the total coliform-positive result; or

(ii) On the basis of the results of repeat samples collected as required in R309-210-5(2), the total coliform-positive sample resulted from a non-distribution system plumbing problem on the basis that all repeat samples taken at the same tap as the original total coliform-positive are total coliform-positive, but all repeat samples within five service connections are total coliform-negative; or

(iii) Substantial grounds exist to establish that the total coliform-positive result is due to a circumstance or condition which does not reflect water quality in the distribution system. In this case:

(A) The Director shall document this decision in writing; and

(B) The Director or his representative shall sign the document; and

(C) The Director will make the document available to the EPA and the public. The system shall still collect the required repeat samples as outlined in R309-210-5(2) in order to determine compliance with the MCL.

(b) A laboratory shall invalidate a total coliform sample (unless total coliforms are detected) if the results are indeterminate because of possible interference. A system shall collect and have analyzed, another total coliform sample from the same location as the original sample within 24 hours of being notified of the indeterminate result. The system shall continue to resample within 24 hours of notification of indeterminate results and have the samples analyzed until a valid sample result is obtained. The 24-hour time limit may be waived by the Director on a case-by-case basis if the system has logistical problems beyond its control. Interference for each type of analysis is listed below.

(i) The sample produces a turbid culture in the absence of gas production when using an analytical method where gas formation is examined.

(ii) The sample produces a turbid culture in the absence of an acid reaction when using the Presence-Absence Coliform Test.

(iii) The sample exhibits confluent growth or produces colonies too numerous to count when using an analytical method using a membrane filter.

(5) Fecal coliforms/*Escherichia coli* (*E. coli*) testing

(a) If any routine sample, repeat sample or additional sample is total coliform-positive, the system shall have the total coliform-positive culture medium analyzed to determine if fecal coliforms are present. The system may test for *E. coli* in lieu of fecal coliforms.

(b) Notification of Director and public - If fecal coliforms or *E. coli* are confirmed present (as per R309-200-5(6)(b)), the system shall notify the Director by the end of the day when the system is notified of the test results. If the system is notified after the Division of Drinking Water has closed, the system shall notify the Director before the close of the next business day and begin public notification using the mandatory health effects language R309-220) within 72 hours.

(c) The Director may allow a system to forego the analysis for fecal coliforms or *E. coli*, if the system assumes

that the total coliform positive sample is fecal coliform-positive or *E. coli*-positive. The system must notify the Director of this decision and begin the required public notification.

(6) Best Available Technology

The Director may require an appropriate treatment process using the best available technology (BAT) in order to bring the water into compliance with the maximum contaminant level for microbiological quality. The BAT will be determined by the Director.

R309-210-6. Lead and Copper Monitoring.

(1) General requirements.

(a) Applicability and effective dates

(i) The requirements of R309-210-6, unless otherwise indicated, apply to community water systems and non-transient non-community water systems (hereinafter referred to as water systems or systems).

(b) R309-210-6 establishes a treatment technique that includes requirements for corrosion control treatment, source water treatment, lead service line replacement, and public education. These requirements are triggered, in some cases, by lead and copper action levels measured in samples collected at consumers' taps.

(c) Corrosion control treatment requirements

(i) All water systems shall install and operate optimal corrosion control treatment. However, any water system that complies with the applicable corrosion control treatment requirements specified by the Director under R309-210-6(2) and R309-210-6(4)(a) shall be deemed in compliance with this treatment requirement.

(d) Source water treatment requirements

Any system exceeding the lead or copper action level shall implement all applicable source water treatment requirements specified by the Director under R309-210-6(4)(b).

(e) Lead service line replacement requirements

Any system exceeding the lead action level after implementation of applicable corrosion control and source water treatment requirements shall complete the lead service line replacement requirements contained in R309-210-6(4)(c).

(f) Public education requirements

Pursuant to R309-210-6(7), all water systems must provide a consumer notice of lead tap water monitoring results to persons served at the sites (taps) that are tested. Any system exceeding the lead action level shall implement the public education requirements.

(g) Monitoring and analytical requirements

Tap water monitoring for lead and copper, monitoring for water quality parameters, source water monitoring for lead and copper, and analyses of the monitoring results shall be completed in compliance with R309-210-6(3), R309-210-6(5), R309-210-6(6) and R309-200-8.

(h) Reporting requirements

Systems shall report to the Director any information required by the treatment provisions of this subpart and R309-210-6(8).

(i) Recordkeeping requirements

Systems shall maintain records in accordance with R309-105-17(2).

(j) Violation of primary drinking water rules

Failure to comply with the applicable requirements of R309-210-6., including requirements established by the Director pursuant to these provisions, shall constitute a violation of the primary drinking water regulations for lead and/or copper.

(2) Applicability of corrosion control treatment steps to small, medium-size and large water systems.

(a) Systems shall complete the applicable corrosion

control treatment requirements described in R309-210-6(4)(a) by the deadlines established in this section.

(i) A large system (serving greater than 50,000 persons) shall complete the corrosion control treatment steps specified in R309-210-6(2)(d), unless it is deemed to have optimized corrosion control under R309-210-6(2)(b)(ii) or (b)(iii).

(ii) A small system (serving less than 3300 persons) and a medium-size system (serving greater than 3,300 and less than 50,000 persons) shall complete the corrosion control treatment steps specified in R309-210-6(2)(e), unless it is deemed to have optimized corrosion control under R309-210-6(2)(b)(i), (b)(ii), or (b)(iii).

(b) A system is deemed to have optimized corrosion control and is not required to complete the applicable corrosion control treatment steps identified in this section if the system satisfies one of the criteria in paragraphs (b)(i) through (b)(iii) of this section. Any such system deemed to have optimized corrosion control under this paragraph, and which has treatment in place, shall continue to operate and maintain optimal corrosion control treatment and meet any requirements that the Director determines appropriate to ensure optimal corrosion control treatment is maintained.

(i) A small or medium-size water system is deemed to have optimized corrosion control if the system meets the lead and copper action levels during each of two consecutive six-month monitoring periods conducted in accordance with R309-210-6(3).

(ii) Any water system may be deemed by the Director to have optimized corrosion control treatment if the system demonstrates to the satisfaction of the Director that it has conducted activities equivalent to the corrosion control steps applicable to such system under this section. If the Director makes this determination, it shall provide the system with written notice explaining the basis for its decision and shall specify the water quality control parameters representing optimal corrosion control in accordance with R309-210-6(4)(a)(vi). Water systems deemed to have optimized corrosion control under this paragraph shall operate in compliance with the Director designated optimal water quality control parameters in accordance with R309-210-6(4)(a)(vii) and continue to conduct lead and copper tap and water quality parameter sampling in accordance with R309-210-6(3)(d)(iii) and R309-210-6(5)(d), respectively. A system shall provide the Director with the following information in order to support a determination under this paragraph:

(A) the results of all test samples collected for each of the water quality parameters in R309-210-6(4)(a)(iii)(C).

(B) a report explaining the test methods used by the water system to evaluate the corrosion control treatments listed in R309-210-6(4)(a)(iii)(A), the results of all tests conducted, and the basis for the system's selection of optimal corrosion control treatment;

(C) a report explaining how corrosion control has been installed and how it is being maintained to insure minimal lead and copper concentrations at consumers' taps; and

(D) the results of tap water samples collected in accordance with R309-210-6(3) at least once every six months for one year after corrosion control has been installed.

(iii) Any water system is deemed to have optimized corrosion control if it submits results of tap water monitoring conducted in accordance with R309-210-6(3) and source water monitoring conducted in accordance with R309-210-6(6) that demonstrates for two consecutive six-month monitoring periods that the difference between the 90th percentile tap water lead level computed under R309-200-5(2)(c), and the highest source water lead concentration, is less than the Practical Quantitation Level (PQL) for lead as specified in R309-104-8.

(A) Those systems whose highest source water lead

level is below the Method Detection Limit may also be deemed to have optimized corrosion control under this paragraph if the 90th percentile tap water lead level is less than or equal to the Practical Quantitation Level for lead for two consecutive 6-month monitoring periods.

(B) Any water system deemed to have optimized corrosion control in accordance with this paragraph shall continue monitoring for lead and copper at the tap no less frequently than once every three calendar years using the reduced number of sites specified in R309-210-6(3)(c) and collecting the samples at times and locations specified in R309-210-6(3)(d)(iv)(D). Any such system that has not conducted a round of monitoring pursuant to R309-210-6(3)(d) since September 30, 1997, shall complete a round of monitoring pursuant to this paragraph no later than September 30, 2000.

(C) Any water system deemed to have optimized corrosion control pursuant to this paragraph shall notify the Director in writing pursuant to R309-210-6(8)(a)(iii) of any upcoming long-term change in treatment or addition of a new source as described in that section. The Director must review and approve the addition of a new source or long-term change in water treatment before it is implemented by the water system. The Director may require any such system to conduct additional monitoring or to take other action the Director deems appropriate to ensure that such systems maintain minimal levels of corrosion in the distribution system.

(D) As of July 12, 2001, a system is not deemed to have optimized corrosion control under this paragraph, and shall implement corrosion control treatment pursuant to paragraph (b)(iii)(E) of this section unless it meets the copper action level.

(E) Any system triggered into corrosion control because it is no longer deemed to have optimized corrosion control under this paragraph shall implement corrosion control treatment in accordance with the deadlines in paragraph (e) of this section. Any such large system shall adhere to the schedule specified in that paragraph for medium-size systems, with the time periods for completing each step being triggered by the date the system is no longer deemed to have optimized corrosion control under this paragraph.

(c) Any small or medium-size water system that is required to complete the corrosion control steps due to its exceedance of the lead or copper action level may cease completing the treatment steps whenever the system meets both action levels during each of two consecutive monitoring periods conducted pursuant to R309-210-6(3) and submits the results to the Director. If any such water system thereafter exceeds the lead or copper action level during any monitoring period, the system (or the Director, as the case may be) shall recommence completion of the applicable treatment steps, beginning with the first treatment step which was not previously completed in its entirety. The Director may require a system to repeat treatment steps previously completed by the system where the Director determines that this is necessary to implement properly the treatment requirements of this section. The Director shall notify the system in writing of such a determination and explain the basis for its decision. The requirement for any small or medium size system to implement corrosion control treatment steps in accordance with paragraph (e) of this section (including systems deemed to have optimized corrosion control under paragraph (b)(i) of this section) is triggered whenever any small or medium size system exceeds the lead or copper action level.

(d) Treatment steps and deadlines for large systems

Except as provided in R309-210-6(2)(b)(ii) and (b)(iii), large systems shall complete the following corrosion control treatment steps by the indicated dates.

(i) Step 1: The system shall conduct initial monitoring (R309-210-6(3)(d)(i) and R309-210-6(5)(b)) during two consecutive six-month monitoring periods by January 1, 1993.

(ii) Step 2: The system shall complete corrosion control studies (R309-210-6(4)(a)(iii)) by July 1, 1994.

(iii) Step 3: The Director shall designate optimal corrosion control treatment (R309-210-6(4)(a)(iv)) by January 1, 1995.

(iv) Step 4: The system shall install optimal corrosion control treatment (R309-210-6(4)(a)(v)) by January 1, 1997.

(v) Step 5: The system shall complete follow-up sampling (R309-210-6(3)(d)(ii) and R309-210-6(5)(c)) by January 1, 1998.

(vi) Step 6: The Director shall review installation of treatment and designate optimal water quality control parameters (R309-210-6(4)(a)(vi)) by July 1, 1998.

(vii) Step 7: The system shall operate in compliance with the Director specified optimal water quality control parameters (R309-210-6(4)(a)(vii)) and continue to conduct tap sampling (R309-210-6(3)(d)(iii) and R309-210-6(5)(d)).

(e) Treatment steps and deadlines for small and medium-size systems

Except as provided in R309-210-6(2)(b), small and medium-size systems shall complete the following corrosion control treatment steps by the indicated time periods.

(i) Step 1: The system shall conduct initial tap sampling (R309-210-6(3)(d)(i) and R309-210-6(5)(b)) until the system either exceeds the lead or copper action level or becomes eligible for reduced monitoring under R309-210-6(3)(d)(iv). A system exceeding the lead or copper action level shall recommend optimal corrosion control treatment (R309-210-6(4)(a)) within six months after the end of the monitoring period during which it exceeds one of the action levels.

(ii) Step 2: Within 12 months after the end of the monitoring period during which a system exceeds the lead or copper action level, the Director may require the system to perform corrosion control studies (R309-210-6(4)(b)). If the Director does not require the system to perform such studies, the Director shall specify optimal corrosion control treatment (R309-210-6(4)(a)(iv)) within the following time-frames:

(A) for medium-size systems, within 18 months after the end of the monitoring period during which such system exceeds the lead or copper action level,

(B) for small systems, within 24 months after the end of the monitoring period during which such system exceeds the lead or copper action level.

(iii) Step 3: If the Director requires a system to perform corrosion control studies under step 2, the system shall complete the studies (R309-210-6(4)(a)(iii)) within 18 months after the Director requires that such studies be conducted.

(iv) Step 4: If the system has performed corrosion control studies under step 2, the Director shall designate optimal corrosion control treatment (R309-210-6(4)(a)(iv)) within 6 months after completion of step 3.

(v) Step 5: The system shall install optimal corrosion control treatment (R309-210-6(4)(a)(v)) within 24 months after the Director designates such treatment.

(vi) Step 6: The system shall complete follow-up sampling (R309-210-6(3)(d)(ii) and R309-210-6(5)(c)) within 36 months after the Director designates optimal corrosion control treatment.

(vii) Step 7: The Director shall review the system's installation of treatment and designate optimal water quality control parameters (R309-210-6(4)(a)(vi)) within 6 months after completion of step 6.

(viii) Step 8: The system shall operate in compliance with the Director-designated optimal water quality control

parameters (R309-210-6(4)(a)(vii)) and continue to conduct tap sampling (R309-210-6(3)(d)(iii) and R309-210-6(5)(d)).

(3) Monitoring requirements for lead and copper in tap water.

(a) Sample site location

(i) By the applicable date for commencement of monitoring under R309-210-6(3)(d)(i), each water system shall complete a materials evaluation of its distribution system in order to identify a pool of targeted sampling sites that meets the requirements of this section, and which is sufficiently large to ensure that the water system can collect the number of lead and copper tap samples required in R309-210-6(3)(c). All sites from which first draw samples are collected shall be selected from this pool of targeted sampling sites. Sampling sites may not include faucets that have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants.

(ii) A water system shall use the information on lead, copper, and galvanized steel when conducting a materials evaluation. When an evaluation of this information is insufficient to locate the requisite number of lead and copper sampling sites that meet the targeting criteria in R309-210-6(3)(a), the water system shall review the sources of information listed below in order to identify a sufficient number of sampling sites. In addition, the system shall seek to collect such information where possible in the course of its normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities):

(A) all plumbing codes, permits, and records in the files of the building department(s) which indicate the plumbing materials that are installed within publicly and privately owned structures connected to the distribution system;

(B) all inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system; and

(C) all existing water quality information, which includes the results of all prior analyses of the system or individual structures connected to the system, indicating locations that may be particularly susceptible to high lead or copper concentrations.

(iii) The sampling sites selected for a community water system's sampling pool ("tier 1 sampling sites") shall consist of single family structures that:

(A) contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or

(B) are served by a lead service line.

When multiple-family residences comprise at least 20 percent of the structures served by a water system, the system may include these types of structures in its sampling pool.

(iv) Any community water system with insufficient tier 1 sampling sites shall complete its sampling pool with "tier 2 sampling sites", consisting of buildings, including multiple-family residences that:

(A) contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or

(B) are served by a lead service line.

(v) Any community water system with insufficient tier 1 and tier 2 sampling sites shall complete its sampling pool with "tier 3 sampling sites", consisting of single family structures that contain copper pipes with lead solder installed before 1983. A community water system with insufficient tier 1, tier 2 and tier 3 sampling sites shall complete its sampling pool with representative sites throughout the distribution system. For the purpose of this paragraph, a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system.

(vi) The sampling sites selected for a non-transient non-

community water system ("tier 1 sampling sites") shall consist of buildings that:

(A) contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or

(B) are served by a lead service line.

(vii) A non-transient non-community water system with insufficient tier 1 sites that meet the targeting criteria in R309-210-6(3)(a)(vi) shall complete its sampling pool with sampling sites that contain copper pipes with lead solder installed before 1983. If additional sites are needed to complete its sampling pool, the non-transient non-community water system shall use representative sites throughout the distribution system. For the purpose of this paragraph, a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system.

(viii) Any water system whose distribution system contains lead service lines shall draw 50 percent of the samples it collects during each monitoring period from sites that contain lead pipes, or copper pipes with lead solder, and 50 percent of the samples from sites served by a lead service line. A water system that cannot identify a sufficient number of sampling sites served by a lead service line shall collect first draw samples from all of the sites identified as being served by such lines.

(b) Sample collection methods

(i) All tap samples for lead and copper collected in accordance with this section, with the exception of lead service line samples collected under R309-210-6(4)(c)(iii) and samples collected under (b)(v) of this section, shall be first draw samples.

(ii) Each first-draw tap sample for lead and copper shall be one liter in volume and have stood motionless in the plumbing system of each sampling site for at least six hours. First draw samples from residential housing shall be collected from the cold water kitchen tap or bathroom sink tap. First-draw samples from a nonresidential building shall be one liter in volume and shall be collected at an interior tap from which water is typically drawn for consumption. Non-first-draw samples collected in lieu of first-draw samples pursuant to paragraph (b)(v) of this section shall be one liter in volume and shall be collected at an interior tap from which water is typically drawn for consumption. First draw samples may be collected by the system or the system may allow residents to collect first draw samples after instructing the residents of the sampling procedures specified in this paragraph. To avoid problems with residents handling nitric acid, acidification of first draw samples may be done up to fourteen days after the sample is collected. After acidification to resolubilize the metals, the sample must stand in the original container for the time specified in R309-200-4(3). If a system allows residents to perform sampling, the system may not challenge, based on alleged errors in sample collection, the accuracy of sampling results.

(iii) Each service line sample shall be one liter in volume and have stood motionless in the lead service line for at least six hours. Lead service line samples shall be collected in one of the following three ways:

(A) at the tap after flushing the volume of water between the tap and the lead service line. The volume of water shall be calculated based on the interior diameter and length of the pipe between the tap and the lead service line;

(B) tapping directly into the lead service line; or

(C) if the sampling site is a building constructed as a single-family residence, allowing the water to run until there is a significant change in temperature which would be indicative of water that has been standing in the lead service line.

(iv) A water system shall collect each first draw tap

sample from the same sampling site from which it collected a previous sample. If, for any reason, the water system cannot gain entry to a sampling site in order to collect a follow-up tap sample, the system may collect the follow-up tap sample from another sampling site in its sampling pool as long as the new site meets the same targeting criteria, and is within reasonable proximity of the original site.

(v) A non-transient non-community water system, or a community water system that meets the criteria for R309-210-6(7)(b)(vii), that does not have enough taps that can supply first draw samples, as defined in R309-110, may apply to the Director in writing to substitute non-first-draw samples. Such systems must collect as many first draw samples from appropriate taps as possible and identify sampling times and locations that would likely result in the longest standing time for the remaining sites. The Director herein waives the requirement for prior Director approval of non-first draw samples sites selected by the system.

(c) Number of samples

Water systems shall collect at least one sample during each monitoring period specified in R309-210-6(3)(d) from the number of sites listed in the first column (standard monitoring) in Table 210-3. A system conducting reduced monitoring under R309-210-6(3)(d)(iv) may collect one sample from the number of sites specified in the second column (reduced monitoring) in Table 210-3 during each monitoring period specified in R309-210-6(3)(d)(iv). Such reduced monitoring sites shall be representative of the sites required for standard monitoring. A public water system that has fewer than five drinking water taps, that can be used for human consumption meeting the sample site criteria of R309-210-6(6)(a) to reach the required number of sample sites listed in paragraph (c) of this section, must collect at least one sample from each tap and then must collect additional samples from those taps on different days during the monitoring period to meet the required number of sites. Alternatively the Director may allow these public water systems to collect a number of samples less than the number of sites specified in paragraph (c) of this section, provided that 100 percent of all taps that can be used for human consumption are sampled. The Director must approve this reduction of the minimum number of samples in writing based on a request from the system or onsite verification by the Director. The Director may specify sampling locations when a system is conducting reduced monitoring to ensure that fewer number of sampling sites are representative of the risk to public health as outlined in R309-210-6(3)(a).

TABLE 210-3
NUMBER OF LEAD AND COPPER SAMPLING SITES

System Size (# People Served)	# of sites (Standard Monitoring)	# of sites (Reduced Monitoring)
Greater than 100,000	100	50
10,001 to 100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
100 or less	5	5

(d) Timing of monitoring

(i) Initial tap sampling

The first six-month monitoring period for small, medium-size and large systems shall begin on the following dates in Table 210-4:

TABLE 210-4
INITIAL LEAD AND COPPER MONITORING PERIODS

System Size (# People Served)	First six-month Monitoring Period Begins On
Greater than 50,000	January 1, 1992

3,301 to 50,000
3,300 or less

July 1, 1992
July 1, 1993

(A) All large systems shall monitor during two consecutive six-month periods.

(B) All small and medium-size systems shall monitor during each six-month monitoring period until:

(I) the system exceeds the lead or copper action level and is therefore required to implement the corrosion control treatment requirements under R309-210-6(2), in which case the system shall continue monitoring in accordance with R309-210-6(3)(d)(ii), or

(II) the system meets the lead and copper action levels during two consecutive six-month monitoring periods, in which case the system may reduce monitoring in accordance with R309-210-6(3)(d)(iv).

(ii) Monitoring after installation of corrosion control and source water treatment

(A) Any large system which installs optimal corrosion control treatment pursuant to R309-210-6(2)(d)(iv) shall monitor during two consecutive six-month monitoring periods by the date specified in R309-210-6(2)(d)(v).

(B) Any small or medium-size system which installs optimal corrosion control treatment pursuant to R309-210-6(2)(e)(v) shall monitor during two consecutive six-month monitoring periods by the date specified in R309-210-6(2)(e)(vi).

(C) Any system which installs source water treatment pursuant to R309-210-6(4)(b)(i)(C) shall monitor during two consecutive six-month monitoring periods by the date specified in R309-210-6(4)(b)(i)(D).

(iii) Monitoring after Director specifies water quality parameter values for optimal corrosion control

After the Director specifies the values for water quality control parameters under R309-210-6(4)(a)(vi), the system shall monitor during each subsequent six-month monitoring period, with the first monitoring period to begin on the date the Director specifies the optimal values under R309-210-6(4)(a)(vi).

(iv) Reduced monitoring

(A) A small or medium-size water system that meets the lead and copper action levels during each of two consecutive six-month monitoring periods may reduce the number of samples in accordance with R309-210-6(3)(c), Table 210-3, and reduce the frequency of sampling to once per year. A small or medium water system collecting fewer than five samples as specified in paragraph (c) of this section, that meets the lead and copper action levels during each of two consecutive six-month monitoring periods may reduce the frequency of sampling to once per year. In no case can the system reduce the number of samples required below the minimum of one sample per available tap. This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period.

(B) Any water system that meets the lead action level and maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the Director under R309-210-6(4)(a)(vi) during each of two consecutive six-month monitoring periods may reduce the frequency of monitoring to once per year and reduce the number of lead and copper samples in accordance with paragraph (c) of this section if it receives written approval from the Director. This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period. The Director shall review monitoring, treatment, and other relevant information submitted by the water system in accordance with R309-210-6(8), and shall notify the system in writing when it determines the system is eligible to commence reduced monitoring

pursuant to this paragraph. The Director shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

(C) A small or medium-size water system that meets the lead and copper action levels during three consecutive years of monitoring may reduce the frequency of monitoring for lead and copper from annually to once every three years. Any water system that meets the lead action level and maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the Director under R309-210-6(4)(f) during three consecutive years of monitoring may reduce the frequency of monitoring from annually to once every three years if it receives written approval from the Director. Samples collected once every three years shall be collected no later than every third calendar year. The Director shall review monitoring, treatment, and other relevant information submitted by the water system in accordance with R309-210-6(8), and shall notify the system in writing when it determines the system is eligible to reduce the frequency of monitoring to once every three years. The Director shall review, and where appropriate, revise its determination when the system submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

(D) A water system that reduces the number and frequency of sampling shall collect these samples from representative sites included in the pool of targeted sampling sites identified in R309-210-6(3)(a). Systems sampling annually or less frequently shall conduct the lead and copper tap sampling during the months of June, July, August or September unless the Director has approved a different sampling period in accordance with paragraph (d)(iv)(D)(I) of this section.

(I) The Director, at its discretion, may approve a different period for conducting the lead and copper tap sampling for systems collecting a reduced number of samples. Such a period shall be no longer than four consecutive months and must represent a time of normal operation where the highest levels of lead are most likely to occur. For a non-transient non-community water system that does not operate during the months of June through September, and for which the period of normal operation where the highest levels of lead are most likely to occur is not known, the Director shall designate a period that represents a time of normal operation for the system. This sampling shall begin during the period approved or designated by the State in the calendar year immediately following the end of the second consecutive six-month monitoring period for systems initiating annual monitoring and during the three-year period following the end of the third consecutive calendar year of annual monitoring for systems initiating triennial monitoring.

(II) Systems monitoring annually, that have been collecting samples during the months of June through September and that receive Director approval to alter their sample collection period under paragraph (d)(iv)(D)(I) of this section, must collect their next round of samples during a time period that ends no later than 21 months after the previous round of sampling. Systems monitoring triennially that have been collecting samples during the months of June through September, and receive Director approval to alter the sampling collection period as per (d)(iv)(D)(I) of this section, must collect their next round of samples during a time period that ends no later than 45 months after the previous round of sampling. Subsequent rounds of sampling must be collected annually or triennially, as required by this section. Small systems with waivers, granted pursuant to paragraph (g) of

this section, that have been collecting samples during the months of June through September and receive Director approval to alter their sample collection period under paragraph (d)(iv)(D)(I) of this section must collect their next round of samples before the end of the 9 year period.

(E) Any water system that demonstrates for two consecutive 6 month monitoring periods that the tap water lead level computed under R309-200-5(2)(c) is less than or equal to 0.005 mg/L and the tap water copper level computed under R309-200-5(2)(c) is less than or equal to 0.65 mg/L may reduce the number of samples in accordance paragraph (c) of this section and reduce the frequency of sampling to once every three calendar years.

(F)(I) A small or medium-size water system subject to reduced monitoring that exceeds the lead or copper action level shall resume sampling in accordance R309-210-6(3)(d)(iii) and collect the number of samples specified for standard monitoring under R309-210-6(3)(c), Table 210-3. Such system shall also conduct water quality parameter monitoring in accordance with R309-210-6(5)(b), (c) or (d) (as appropriate) during the monitoring period in which it exceeded the action level. Any such system may resume annual monitoring for lead and copper at the tap at the reduced number of sites specified in paragraph (c) of this section after it has completed two subsequent consecutive six month rounds of monitoring that meet the criteria of paragraph (d)(iv)(A) of this section or may resume triennial monitoring for lead and copper at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either paragraph (d)(vi)(C) or (d)(iv)(D) of this section.

(II) Any water system subject to the reduced monitoring frequency that fails to meet the lead action level during any four-month monitoring period or that fails to operate at or above the minimum value or within the range of values for the water quality parameters specified by the Director under R309-210-6(4)(a)(vi) for more than nine days in any six-month period specified in R309-210-6(5)(d) shall conduct tap water sampling for lead and copper at the frequency specified in paragraph (d)(iii) of this section, collect the number of samples specified for standard monitoring under paragraph (c) of this section, and shall resume monitoring for water quality parameters within the distribution system in accordance with R309-210-6(5)(d). This standard tap water sampling shall begin no later than the six-month period beginning January 1 of the calendar year following the lead action level exceedance or water quality parameter excursion. Such a system may resume reduced monitoring for lead and copper at the tap and for water quality parameters within the distribution system under the following conditions:

(aa) The system may resume annual monitoring for lead and copper at the tap at the reduced number of sites specified in paragraph (c) of this section after it has completed two subsequent six month rounds of monitoring that meet the criteria of paragraph (d)(iv)(B) of this section and the system has received written approval from the Director that it is appropriate to resume reduced monitoring on an annual frequency. This sampling shall begin during the calendar year immediately following the end of the second consecutive six-month monitoring period.

(bb) The system may resume triennial monitoring for lead and copper at the tap at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either paragraph (d)(iv)(C) or (d)(iv)(E) of this section and the system has received written approval from the Director that it is appropriate to resume triennial monitoring.

(cc) The system may reduce the number of water quality parameter tap water samples required in accordance with

R309-210-6(5)(e)(i) and the frequency with which it collects such samples in accordance with R309-210-6(5)(e)(ii). Such a system may not resume triennial monitoring for water quality parameters at the tap until it demonstrates, in accordance with the requirements of R309-210-6(5)(e)(ii), that it has requalified for triennial monitoring.

(G) Any water system subject to a reduced monitoring frequency under paragraph (d)(iv) of this section shall notify the Director in writing in accordance with R309-210-6(8)(a)(iii) of any upcoming long-term change in treatment or addition of a new source as described in that section. The Director must review and approve the addition of a new source or long-term change in water treatment before it is implemented by the water system. The Director may require the system to resume sampling in accordance with paragraph (d)(iii) of this section and collect the number of samples specified for standard monitoring under paragraph (c) of this section or take other appropriate steps such as increased water quality parameter monitoring or re-evaluation of its corrosion control treatment given the potentially different water quality considerations.

(e) Additional monitoring by systems

The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the system and the Director in making any determinations (i.e., calculating the 90th percentile lead or copper level).

(f) Invalidation of lead or copper tap water samples. A sample invalidated under this paragraph does not count toward determining lead or copper 90th percentile levels under Sec. 141.80 (c) (3) or toward meeting the minimum monitoring requirements of paragraph (c) of this section.

(i) The Director may invalidate a lead or copper tap water sample at least if one of the following conditions is met.

(A) The laboratory establishes that improper sample analysis caused erroneous results.

(B) The Director determines that the sample was taken from a site that did not meet the site selection criteria of this section.

(C) The sample container was damaged in transit.

(D) There is substantial reason to believe that the sample was subject to tampering.

(ii) The system must report the results of all samples to the Director and all supporting documentation for samples the system believes should be invalidated.

(iii) To invalidate a sample under paragraph (f)(i) of this section, the decision and the rationale for the decision must be documented in writing. The Director may not invalidate a sample solely on the grounds that a follow-up sample result is higher or lower than that of the original sample.

(iv) The water system must collect replacement samples for any samples invalidated under this section if, after the invalidation of one or more samples, the system has too few samples to meet the minimum requirements of paragraph (c) of this section. Any such replacement samples must be taken as soon as possible, but no later than 20 days after the date the Director invalidates the sample or by the end of the applicable monitoring period, whichever occurs later. Replacement samples taken after the end of the applicable monitoring period shall not also be used to meet the monitoring requirements of a subsequent monitoring period. The replacement samples shall be taken at the same locations as the invalidated samples or, if that is not possible, at locations other than those already used for sampling during the monitoring period.

(g) Monitoring waivers for small systems. Any small system that meets the criteria of this paragraph may apply to the Director to reduce the frequency of monitoring for lead and copper under this section to once every nine years (i.e., a full waiver) if it meets all of the materials criteria specified in

paragraph (g)(i) of this section and all of the monitoring criteria specified in paragraph (g) (ii) of this section. Any small system that meets the criteria in paragraphs (g) (i) and (ii) of this section only for lead, or only for copper, may apply to the Director for a waiver to reduce the frequency of tap water monitoring to once every nine years for that contaminant only (i.e., a partial waiver).

(i) Materials criteria. The system must demonstrate that its distribution system and service lines and all drinking water supply plumbing, including plumbing conveying drinking water within all residences and buildings connected to the system, are free of lead-containing materials and/or copper-containing materials, as those terms are defined in this paragraph, as follows:

(A) Lead. To qualify for a full waiver, or a waiver of the tap water monitoring requirements for lead (i.e., a lead waiver), the water system must provide certification and supporting documentation to the Director that the system is free of all lead-containing materials, as follows:

(I) It contains no plastic pipes which contain lead plasticizers, or plastic service lines which contain lead plasticizers; and

(II) It is free of lead service lines, lead pipes, lead soldered pipe joints, and leaded brass or bronze alloy fittings and fixtures, unless such fittings and fixtures meet the specifications of any standard established pursuant to 42 U.S.C. 300g-6(e) (SDWA section 1417 (e)).

(B) Copper. To qualify for a full waiver, or waiver of the tap water monitoring requirements for copper (i.e., a copper waiver), the water system must provide certification and supporting documentation to the Director that the system contains no copper pipes or copper service lines.

(ii) Monitoring criteria for waiver issuance. The system must have completed at least one 6-month round of standard tap water monitoring for lead and copper at sites approved by the Director and from the number of sites required by paragraph (c) of this section and demonstrate that the 90th percentile levels for any and all rounds of monitoring conducted since the system became free of all lead-containing and/or copper-containing materials, as appropriate, meet the following criteria.

(A) Lead levels. To qualify for a full waiver, or a lead waiver, the system must demonstrate that the 90th percentile lead level does not exceed 0.005 mg/L.

(B) Copper levels. To qualify for a full waiver, or a copper waiver, the system must demonstrate that the 90th percentile lead level does not exceed 0.65 mg/L.

(iii) Director approval of waiver application. The Director shall notify the system of its waiver determination, in writing, setting forth the basis of its decision and any condition of the waiver. As a condition of the waiver, the Director may require the system to perform specific activities (e.g., limited monitoring, periodic outreach to customers to remind them to avoid installation of materials that might void the waiver) to avoid the risk of lead or copper concentration of concern in tap water. The small system must continue monitoring for lead and copper at the tap as required by paragraphs (d) (i) through (d) (iv) of this section, as appropriate, until it receives written notification from the Director the waiver has been approved.

(iv) Monitoring frequency for systems with waivers.

(A) A system with a full waiver must conduct tap water monitoring for lead and copper in accordance with paragraph (d)(iv)(D) of this section at the reduced number of sampling sites identified in paragraph (c) of this section at least once every nine years and provide the materials certification specified in paragraph (g)(i) of this section for both lead and copper to the Director along with the monitoring results. Samples collected every nine years shall be collected no later

than every ninth calendar year.

(B) A system with a partial waiver must conduct tap water monitoring for the waived contaminant in accordance with paragraph (d)(iv)(D) of this section at the reduced number of sampling sites specified in paragraph (c) of this section at least once every nine years and provide the materials certification specified in paragraph (g)(i) of this section pertaining to the waived contaminant along with the monitoring results. Such a system also must continue to monitor for the non-waived contaminant in accordance with requirements of paragraph (d)(i) through (d)(iv) of this section, as appropriate.

(C) Any water system with a full or partial waiver shall notify the Director in writing in accordance with R309-210-6(8)(a)(iii) of any upcoming long-term change in treatment or addition of a new source, as described in that section. The Director must review and approve the addition of a new source or long-term change in water treatment before it is implemented by the water system. The Director has the authority to require the system to add or modify waiver conditions (e.g., require recertification that the system is free of lead-containing and/or copper-containing materials, require additional round(s) of monitoring), if it deems such modifications are necessary to address treatment or source water changes at the system.

(D) If a system with a full or partial waiver because aware that it is no longer free of lead-containing or copper-containing materials, as appropriate, (e.g., as a result of new construction or repairs), the system shall notify the Director in writing no later than 60 days after becoming aware of such a change.

(v) Continued eligibility. If the system continues to satisfy the requirements of paragraph (g) (iv) of this section, the waiver will be renewed automatically, unless any of the conditions listed in paragraph (g)(v)(A) through (g)(v)(C) of this section occurs. A system whose waiver has been revoked may re-apply for a waiver at such time as it again meets the appropriate materials and monitoring criteria of paragraphs (g)(i) and (g)(ii) of this section.

(A) A system with a full waiver or lead waiver no longer satisfies the materials criteria of paragraph (g)(i)(A) of this section or has a 90th percentile lead level greater than 0.005 mg/L.

(B) A system with a full waiver or a copper waiver no longer satisfies the materials criteria of paragraph (g)(i)(B) of this section or has a 90th percentile copper level greater than 0.65 mg/L.

(C) The Director notifies the system, in writing, that the waiver has been revoked, setting forth the basis of its decision.

(vi) Requirements following waiver revocation. A system whose full or partial waiver has been revoked by the Director is subject to the corrosion control treatment and lead and copper tap water monitoring requirements, as follows:

(A) If the system exceeds the lead and/or copper action level, the system must implement corrosion control treatment in accordance with the deadlines specified in R309-210-6(2)(e), and any other applicable requirements of this subpart.

(B) If the system meets both the lead and the copper action level, the system must monitor for lead and copper at the tap no less frequently than once every three years using the reduced number of sample sites specified in paragraph (c) of this section.

(vii) Pre-existing waivers. Small system waivers approved by the Director in writing prior to April 11, 2000 shall remain in effect under the following conditions:

(A) If the system has demonstrated that it is both free of lead-containing and copper-containing materials, as required by paragraph (g)(i) of this section and that its 90th percentile

lead levels and 90th percentile copper levels meet the criteria of paragraph (g)(ii) of this section, the waiver remains in effect so long as the system continues to meet the waiver eligibility criteria of paragraph (g)(v) of this section. The first round of tap water monitoring conducted pursuant to paragraph (g)(iv) of this section shall be completed no later than nine years after the last time the system has monitored for lead and copper at the tap.

(B) If the system has met the materials criteria of paragraph (g)(i) of this section but has not met the monitoring criteria of paragraph (g)(ii) of this section, the system shall conduct a round of monitoring for lead and copper at the tap demonstrating that it meets the criteria of paragraph (g)(ii) of this section no later than September 30, 2000. Thereafter, the waiver shall remain in effect as long as the system meets the continued eligibility criteria of paragraph (g)(v) of this section. The first round of tap water monitoring conducted pursuant to paragraph (g)(iv) of this section shall be completed no later than nine years after the round of monitoring conducted pursuant to paragraph (g)(ii) of this section.

(4) Corrosion Control for Control of Lead and Copper

(a) Description of corrosion control treatment requirements.

Each system shall complete the corrosion control treatment requirements described below which are applicable to such system under R309-210-6(2).

(i) System recommendation regarding corrosion control treatment

Based upon the results of lead and copper tap monitoring and water quality parameter monitoring, small and medium-size water systems exceeding the lead or copper action level shall recommend installation of one or more of the corrosion control treatments listed in R309-210-6(4)(a)(iii)(A) which the system believes constitutes optimal corrosion control for that system. The Director may require the system to conduct additional water quality parameter monitoring in accordance with R309-210-6(5)(b) to assist the Director in reviewing the system's recommendation.

(ii) Studies of corrosion control treatment required for small and medium-size systems.

The Director may require any small or medium-size system that exceeds the lead or copper action level to perform corrosion control studies under R309-210-6(4)(a)(iii) to identify optimal corrosion control treatment for the system.

(iii) Performance of corrosion control studies

(A) Any public water system performing corrosion control studies shall evaluate the effectiveness of each of the following treatments, and, if appropriate, combinations of the following treatments to identify the optimal corrosion control treatment for that system:

(I) alkalinity and pH adjustment;

(II) calcium hardness adjustment; and

(III) the addition of a phosphate or silicate based corrosion inhibitor at a concentration sufficient to maintain an effective residual concentration in all test tap samples.

(B) The water system shall evaluate each of the corrosion control treatments using either pipe rig/loop tests, metal coupon tests, partial-system tests, or analyses based on documented analogous treatments with other systems of similar size, water chemistry and distribution system configuration.

(C) The water system shall measure the following water quality parameters in any tests conducted under this paragraph before and after evaluating the corrosion control treatments listed above:

(I) lead;

(II) copper;

(III) pH;

(IV) alkalinity;

(V) calcium;

(VI) conductivity;

(VII) orthophosphate (when an inhibitor containing a phosphate compound is used);

(VIII) silicate (when an inhibitor containing a silicate compound is used);

(IX) water temperature.

(D) The water system shall identify all chemical or physical constraints that limit or prohibit the use of a particular corrosion control treatment and document such constraints with at least one of the following:

(I) data and documentation showing that a particular corrosion control treatment has adversely affected other water treatment processes when used by another water system with comparable water quality characteristics; and/or

(II) data and documentation demonstrating that the water system has previously attempted to evaluate a particular corrosion control treatment and has found that the treatment is ineffective or adversely affects other water quality treatment processes.

(E) The water system shall evaluate the effect of the chemicals used for corrosion control treatment on other water quality treatment processes.

(F) On the basis of an analysis of the data generated during each evaluation, the water system shall recommend to the Director in writing the treatment option that the corrosion control studies indicate constitutes optimal corrosion control treatment for that system. The water system shall provide a rationale for its recommendation along with all supporting documentation specified in R309-210-6(4)(a)(iii)(A) through R309-210-6(4)(a)(iii)(E).

(iv) Designation of optimal corrosion control treatment

(A) Based upon consideration of available information including, where applicable, studies performed under R309-210-6(4)(a)(iii) and a system's recommended treatment alternative, the Director shall either approve the corrosion control treatment option recommended by the system, or designate alternative corrosion control treatment(s) from among those listed in R309-210-6(4)(a)(iii)(A). When designating optimal treatment the Director shall consider the effects that additional corrosion control treatment will have on water quality parameters and on other water quality treatment processes.

(B) The Director shall notify the system of its decision on optimal corrosion control treatment in writing and explain the basis for this determination. If the Director requests additional information to aid its review, the water system shall provide the information.

(v) Installation of optimal corrosion control

Each system shall properly install and operate throughout its distribution system the optimal corrosion control treatment designated by the Director under R309-210-6(4)(a)(iv).

(vi) Review of treatment and specification of optimal water quality control parameters

The Director shall evaluate the results of all lead and copper tap samples and water quality parameter samples submitted by the water system and determine whether the system has properly installed and operated the optimal corrosion control treatment designated by the Director in R309-210-6(4)(a)(iv). Upon reviewing the results of tap water and water quality parameter monitoring by the system, both before and after the system installs optimal corrosion control treatment, the Director shall designate:

(A) A minimum value or a range of values for pH measured at each entry point to the distribution system;

(B) A minimum pH value, measured in all tap samples. Such value shall be equal to or greater than 7.0, unless the

Director determines that meeting a pH level of 7.0 is not technologically feasible or is not necessary for the system to optimize corrosion control;

(C) If a corrosion inhibitor is used, a minimum concentration or a range of concentrations for the inhibitor, measured at each entry point to the distribution system and in all tap samples, that the Director determines is necessary to form a passivating film on the interior walls of the pipes of the distribution system;

(D) If alkalinity is adjusted as part of optimal corrosion control treatment, a minimum concentration or a range of concentrations for alkalinity, measured at each entry point to the distribution system and in all tap samples;

(E) If calcium carbonate stabilization is used as part of corrosion control, a minimum concentration or a range of concentrations for calcium, measured in all tap samples.

The values for the applicable water quality control parameters listed above shall be those that the Director determines to reflect optimal corrosion control treatment for the system. The Director may designate values for additional water quality control parameters determined by the Director to reflect optimal corrosion control for the system. The Director shall notify the system in writing of these determinations and explain the basis for the decisions.

(vii) Continued operation and monitoring. All systems optimizing corrosion control shall continue to operate and maintain optimal corrosion control treatment, including maintaining water quality parameters at or above minimum values or within ranges designated by the Director under paragraph (vi) of this section, in accordance with this paragraph for all samples collected under R309-210-6(5)(d) through (f). Compliance with the requirements of this paragraph shall be determined every six months, as specified under R309-210-6(5)(d). A water system is out of compliance with the requirements of this paragraph for a six-month period of it has excursions for any Director specified parameter on more than nine days during the period. An excursion occurs whenever the daily value for one or more of the water quality parameters measured at a sampling location is below the minimum value or outside the range designated by the Director. Daily values are calculated as follows. The Director has discretion to delete results of obvious sampling errors from this calculation.

(A) On days when more than one measurement for the water quality parameter is collected at the sampling location, the daily value shall be the average of all results collected during the day regardless of whether they are collected through continuous monitoring, grab sampling, or combination of both.

(B) On days when only one measurement for the water quality parameter is collected at the sampling location, the daily value shall be the result of that measurement.

(C) On days when no measurement is collected for the water quality parameter at the sampling location, the daily value shall be the daily value calculated on the most recent day on which the water quality parameter was measured at the sample site.

(viii) Modification of treatment decisions

Upon its own initiative or in response to a request by a water system or other interested party, the Director may modify its determination of the optimal corrosion control treatment under R309-210-6(4)(a)(iv) or optimal water quality control parameters under R309-210-6(4)(a)(vi). A request for modification by a system or other interested party shall: be in writing, explain why the modification is appropriate, and provide supporting documentation. The Director may modify its determination where it concludes that such change is necessary to ensure that the system continues to optimize corrosion control treatment. A revised

determination shall: be made in writing, set forth the new treatment requirements, explain the basis for the Director's decision, and provide an implementation schedule for completing the treatment modifications.

(b) Source water treatment requirements.

Systems shall complete the applicable source water monitoring and treatment requirements (described in the referenced portions of R309-210-6(4)(b)(ii), and in R309-210-6(3), and R309-210-6(6)) by the following deadlines.

(i) Deadlines for Completing Source Water Treatment Steps

(A) Step 1: A system exceeding the lead or copper action level shall complete lead and copper source water monitoring (R309-210-6(6)(b)) and make a treatment recommendation to the Director (R309-210-6(4)(b)(i)) no later than 180 days after the end of the monitoring period during which the lead or copper action level was exceeded.

(B) Step 2: The Director shall make a determination regarding source water treatment (R309-210-6(4)(b)(ii)(B)) within 6 months after submission of monitoring results under step 1.

(C) Step 3: If the Director requires installation of source water treatment, the system shall install the treatment (R309-210-6(4)(b)(ii)(C)) within 24 months after completion of step 2.

(D) Step 4: The system shall complete follow-up tap water monitoring (R309-210-6(3)(d)(ii)) and source water monitoring (R309-210-6(6)(c)) within 36 months after completion of step 2.

(E) Step 5: The Director shall review the system's installation and operation of source water treatment and specify maximum permissible source water levels (R309-210-6(4)(b)(ii)(D)) within 6 months after completion of step 4.

(F) Step 6: The system shall operate in compliance with the Director specified maximum permissible lead and copper source water levels (R309-210-6(4)(b)(ii)(D)) and continue source water monitoring (R309-210-6(6)(d)).

(ii) Description of Source Water Treatment Requirements

(A) System treatment recommendation

Any system which exceeds the lead or copper action level shall recommend in writing to the Director the installation and operation of one of the source water treatments listed in R309-210-6(4)(b)(ii)(B). A system may recommend that no treatment be installed based upon a demonstration that source water treatment is not necessary to minimize lead and copper levels at users' taps.

(B) Determination regarding source water treatment

The Director shall complete an evaluation of the results of all source water samples submitted by the water system to determine whether source water treatment is necessary to minimize lead or copper levels in water delivered to users' taps. If the Director determines that treatment is needed, the Director shall either require installation and operation of the source water treatment recommended by the system (if any) or require the installation and operation of another source water treatment from among the following: ion exchange, reverse osmosis, lime softening or coagulation/filtration. If the Director requests additional information to aid in its review, the water system shall provide the information by the date specified by the Director in its request. The Director shall notify the system in writing of the determination and set forth the basis for the decision.

(C) Installation of source water treatment

Each system shall properly install and operate the source water treatment designated by the Director under R309-210-6(4)(b)(ii)(B).

(D) Review of source water treatment and specification of maximum permissible source water levels

The Director shall review the source water samples taken by the water system both before and after the system installs source water treatment, and determine whether the system has properly installed and operated the source water treatment designated by the Director. Based upon its review, the Director shall designate the maximum permissible lead and copper concentrations for finished water entering the distribution system. Such levels shall reflect the contaminant removal capability of the treatment properly operated and maintained. The Director shall notify the system in writing and explain the basis for the decision.

(E) Continued operation and maintenance

Each water system shall maintain lead and copper levels below the maximum permissible concentrations designated by the Director at each sampling point monitored in accordance with R309-210-6(6). The system is out of compliance with this paragraph if the level of lead or copper at any sampling point is greater than the maximum permissible concentration designated by the Director.

(F) Modification of treatment decisions

Upon its own initiative or in response to a request by a water system or other interested party, the Director may modify its determination of the source water treatment under R309-210-6(4)(b)(ii)(B), or maximum permissible lead and copper concentrations for finished water entering the distribution system under R309-210-6(4)(b)(ii)(D). A request for modification by a system or other interested party shall: be in writing, explain why the modification is appropriate, and provide supporting documentation. The Director may modify the determination where it concludes that such change is necessary to ensure that the system continues to minimize lead and copper concentrations in source water. A revised determination shall: be made in writing, set forth the new treatment requirements, explain the basis for the decision, and provide an implementation schedule for completing the treatment modifications.

(c) Lead service line replacement requirements.

(i)(A) Systems that fail to meet the lead action level in tap samples taken pursuant to R309-210-6(3)(d)(ii), after installing corrosion control and/or source water treatment (whichever sampling occurs later), shall replace lead service lines in accordance with the requirements of this section. If a system is in violation of R309-210-6(2) or R309-210-6(4)(b) for failure to install source water or corrosion control treatment, the Director may require the system to commence lead service line replacement under this section after the date by which the system was required to conduct monitoring under R309-104-4.2.3.d.2. has passed. The first year of lead service line replacement shall begin on the first day following the end of the monitoring period in which the action level was exceeded under paragraph (a) of this section. If monitoring is required annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs. If the Director has established an alternate monitoring period, then the end of the monitoring period will be the last day of that period.

(B) Any water system resuming a lead service line replacement program after the cessation of its lead service line replacement program as allowed by paragraph (f) of this section shall update its inventory of lead service lines to include those sites that were previously determined not to require replacement through the sampling provision under paragraph (c) of this section. The system will then divide the updated number of remaining lead service lines by the number of remaining years in the program to determine the number of lines that must be replaced per year (7 percent lead service line replacement is based on a 15-year replacement program, so, for example, systems resuming lead service line replacement after previously conducting two years of

replacement would divide the updated inventory by 13). For those systems that have completed a 15-year lead service line replacement program, the Director will determine a schedule for replacing or retesting lines that were previously tested out under the replacement program when the system re-exceeds the action level.

(ii) A system shall replace annually at least 7 percent of the initial number of lead service lines in its distribution system. The initial number of lead service lines is the number of lead lines in place at the time the replacement program begins. The system shall identify the initial number of lead service lines in its distribution system, including an identification of the portion(s) owned by the system, based upon a materials evaluation, including the evaluation required under R309-210-6(3)(a) and relevant legal authorities (e.g., contracts, local ordinances) regarding the portion owned by the system. The first year of lead service line replacement shall begin on the date the action level was exceeded in tap sampling referenced in R309-210-6(4)(c)(i).

(iii) A system is not required to replace an individual lead service line if the lead concentration in all service line samples from that line, taken pursuant to R309-210-6(3)(b)(iii), is less than or equal to 0.015 mg/L.

(iv) A water system shall replace that portion of the lead service line that it owns. In cases where the system does not own the entire lead service line, the system shall notify the owner of the line, or the owner's authorized agent, that the system will replace the portion of the service line that it owns and shall offer to replace the owner's portion of the line. A system is not required to bear the cost of replacing the privately-owned portion of the line, nor is it required to replace the privately-owned portion where the owner chooses not to pay the cost of replacing the privately owned portion of the line, or where replacing the privately-owned portion would be precluded by State, local or common law. A water system that does not replace the entire length of the service line also shall complete the following tasks.

(A) At least 45 days prior to commencing with the partial replacement of a lead service line, the water system shall provide notice to the resident(s) of all buildings served by the line explaining that they may experience a temporary increase of lead levels in their drinking water, along with guidance on measures consumers can take to minimize their exposure to lead. The Director may allow the water system to provide notice under the previous sentence less than 45 days prior to commencing partial lead service line replacement where such replacement is in conjunction with emergency repairs. In addition, the water system shall inform the resident(s) served by the line that the system will, at the system's expense, collect a sample from each partially-replaced lead service line that is representative of the water in the service line for analysis of lead content, as prescribed under R309-210-6(3)(b)(iii), within 72 hours after the completion of the partial replacement of the service line. The system shall collect the sample and report the results of the analysis to the owner and the resident(s) served by the line within three business days of receiving the results. Mailed notices post-marked within three business days of receiving the results shall be considered on time.

(B) The water system shall provide the information required by paragraph (c)(iv)(A) of this section to the residents of individual dwellings by mail or by other methods approved by the Director. In instances where multi-family dwellings are served by the line, the water system shall have the option to post the information at a conspicuous location.

(v) The Director shall require a system to replace lead service lines on a shorter schedule than that required by this section, taking into account the number of lead service lines in the system, where such a shorter replacement schedule is

feasible. The Director shall make this determination in writing and notify the system of its finding within 6 months after the system is triggered into lead service line replacement based on monitoring referenced in R309-210-6(4)(c)(i).

(vi) Any system may cease replacing lead service lines whenever first draw samples collected pursuant to R309-210-6(3)(b)(ii) meet the lead action level during each of two consecutive monitoring periods and the system submits the results to the Director. If first draw tap samples collected in any such water system thereafter exceeds the lead action level, the system shall recommence replacing lead service lines, pursuant to R309-210-6(4)(c)(ii)(B).

(vii) To demonstrate compliance with R309-210-6(4)(c)(i) through R309-210-6(4)(c)(iv), a system shall report to the Director the information specified in R309-210-6(8)(e).

(5) Monitoring requirements for water quality parameters.

All large water systems and all small and medium-size systems that exceed the lead or copper action level shall monitor water quality parameters in addition to lead and copper in accordance with this section.

(a) General Requirements

(i) Sample collection methods

(A) Tap samples shall be representative of water quality throughout the distribution system taking into account the number of persons served, the different sources of water, the different treatment methods employed by the system, and seasonal variability. Tap sampling under this section is not required to be conducted at taps targeted for lead and copper sampling under R309-210-6(3)(a).

(B) Samples collected at the entry point(s) to the distribution system shall be from locations representative of each source after treatment. If a system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

(ii) Number of samples

(A) Systems shall collect two tap samples for applicable water quality parameters during each monitoring period specified under R309-210-6(5)(b) through R309-210-6(5)(e) from the following number of sites in Table 210-5.

TABLE 210-5
NUMBER OF WATER QUALITY PARAMETER SAMPLE SITES

System Size (# People Served)	# of Sites For Water Quality Parameters
Greater than 100,000	25
10,001 to 100,000	10
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
100 or less	1

(B) Except as provided in paragraph (c)(iii) of this section, Systems shall collect two samples for each applicable water quality parameter at each entry point to the distribution system during each monitoring period specified in R309-210-6(5)(b). Systems shall collect one sample for each applicable water quality parameter at each entry point to the distribution system during each monitoring period specified in R309-210-6(5)(c) through R309-210-6(5)(e).

(b) Initial Sampling

All large water systems shall measure the applicable water quality parameters as specified below at taps and at each entry point to the distribution system during each six-month monitoring period specified in R309-210-6(3)(d)(i). All small and medium-size systems shall measure the applicable water quality parameters at the locations specified below during each six-month monitoring period specified in

R309-210-6(3)(d)(i) during which the system exceeds the lead or copper action level.

(i) At taps:

(A) pH;

(B) alkalinity;

(C) orthophosphate, when an inhibitor containing a phosphate compound is used;

(D) silica, when an inhibitor containing a silicate compound is used;

(E) calcium;

(F) conductivity; and

(G) water temperature.

(ii) At each entry point to the distribution system: all of the applicable parameters listed in R309-210-6(5)(b)(i).

(c) Monitoring after installation of corrosion control

Any large system which installs optimal corrosion control treatment pursuant to R309-210-6(2)(d)(iv) shall measure the water quality parameters at the locations and frequencies specified below during each six-month monitoring period specified in R309-210-6(3)(d)(ii)(A). Any small or medium-size system which installs optimal corrosion control treatment shall conduct such monitoring during each six-month monitoring period specified in R309-210-6(3)(d)(ii)(B) in which the system exceeds the lead or copper action level.

(i) At taps, two samples for:

(A) pH;

(B) alkalinity;

(C) orthophosphate, when an inhibitor containing a phosphate compound is used;

(D) silica, when an inhibitor containing a silicate compound is used;

(E) calcium, when calcium carbonate stabilization is used as part of corrosion control.

(ii) Except as provided in Paragraph (c)(iii) of this section, at each entry point to the distribution system, at least on sample no less frequently than every two weeks (bi-weekly) for:

(A) pH;

(B) when alkalinity is adjusted as part of optimal corrosion control, a reading of the dosage rate of the chemical used to adjust alkalinity, and the alkalinity concentration; and

(C) when a corrosion inhibitor is used as part of optimal corrosion control, a reading of the dosage rate of the inhibitor used, and the concentration of orthophosphate or silica (whichever is applicable).

(iii) Any ground water system can limit entry point sampling described in paragraph (c)(ii) of this section to those entry points that are representative of water quality and treatment conditions throughout the system. If water from untreated ground water sources mixes with water from treated ground water sources, the system must monitor for water quality parameters both at representative entry points receiving treatment and representative entry points receiving no treatment. Prior to the start of any monitoring under this paragraph, the system shall provide to the Director written information identifying the selected entry points and documentation, including information on seasonal variability, sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system.

(d) Monitoring after Director specifies water quality parameter values for optimal corrosion control.

After the Director specifies the values for applicable water quality control parameters reflecting optimal corrosion control treatment under R309-210-6(4)(a)(vi), all large systems shall measure the applicable water quality parameters in accordance with paragraph (c) of this section and determine compliance with the requirements of R309-210-6(4)(a)(vii) every six months with the first six-month period

to begin on either January 1 or July 1, whichever comes first, after the Director specifies the optimal values under R309-210-6(4)(a)(vi). Any small or medium-size system shall conduct such monitoring during each six-month period specified in this paragraph in which the system exceeds the lead or copper action level. For any such small and medium-size system that is subject to a reduced monitoring frequency pursuant to R309-210-6(3)(d)(iv) at the time of the action level exceedance, the start of the applicable six-month monitoring period under this paragraph shall coincide with the start of the applicable monitoring period under R309-210-6(3)(d)(iv). Compliance with Director-designated optimal water quality parameter values shall be determined as specified under R309-210-6(4)(a)(vii).

(e) Reduced monitoring

(i) Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the Director under R309-210-6(4)(a)(vi) during three consecutive years of monitoring may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in this paragraph (e)(i) of this section from every six months to annually. This sampling begins during the calendar year immediately following the end of the monitoring period in which the third consecutive year of six-month monitoring occurs. Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the Director under R309-210-6(4)(a)(vi), during three consecutive years of annual monitoring under this paragraph may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in paragraph (e)(i) of this section from annually to every three years. This sampling begins no later than the third calendar year following the end of the monitoring period in which the third consecutive year of monitoring occurs.

TABLE 210-6
REDUCED NUMBER OF WATER QUALITY PARAMETER SAMPLE SITES

System Size (# People Served)	Reduced # of Sites for Water Quality Parameters
Greater than 100,000	10
10,001 to 100,000	7
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
100 or less	1

(ii)(A) Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the State under R309-210-6(4)(a)(vi) during three consecutive years of monitoring may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in this paragraph (e)(i) of this section from every six months to annually. This sampling begins during the calendar year immediately following the end of the monitoring period in which the third consecutive year of six-month monitoring occurs. Any water system that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the State under R309-210-6(4)(a)(vi), during three consecutive years of annual monitoring under this paragraph may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in paragraph (e)(i) of this section from annually to every three years. This sampling begins no later than the third calendar year following the end of the monitoring period in which the third consecutive year of monitoring occurs.

(B) A water system may reduce the frequency with

which it collects tap samples for applicable water quality parameters specified in paragraph (e)(i) of this section to every three years if it demonstrates during two consecutive monitoring periods that its tap water lead level at the 90th percentile is less than or equal to the PQL for lead specified in R309-200-4(3), that its tap water copper level at the 90th percentile is less than or equal to 0.65 mg/L for copper in R309-200-5(2)(c), and that it also has maintained the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the Director under R309-210-6(4)(a)(vi). Monitoring conducted every three years shall be done no later than every third calendar year.

(iii) A water system that conducts sampling annually shall collect these samples evenly throughout the year so as to reflect seasonal variability.

(iv) Any water system subject to the reduced monitoring frequency that fails to operate at or above the minimum value or within the range of values for the water quality parameters specified by the Director in R309-210-6(4)(a)(vi) for more than 9 days in any six month period specified in R309-210-6(4)(a)(vii) shall resume distribution system tap water sampling in accordance with the number and frequency requirements in paragraph (d) of this section. Such a system may resume annual monitoring for water quality parameters at the tap at the reduced number of sites specified in paragraph (e)(i) of this section after it has completed two subsequent consecutive six month rounds of monitoring that meet the criteria of that paragraph or may resume triennial monitoring for water quality parameters at the tap at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either paragraph (e)(ii)(A) or (e)(ii)(B) of this section.

(f) Additional monitoring by systems

The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the system and the Director in making any determinations (i.e., determining concentrations of water quality parameters) under this section or R309-210-6(4)(a).

(g) The Director has the authority to allow the use of previously collected monitoring data for purposes of monitoring, if the data were collected in accordance with this section and analyzed in accordance with R309-104-8.

(6) Monitoring requirements for lead and copper in source water.

(a) Sample location, collection methods, and number of samples

(i) A water system that fails to meet the lead or copper action level on the basis of tap samples collected in accordance with R309-210-6(3) shall collect lead and copper source water samples in accordance with the following requirements regarding sample location, number of samples, and collection methods:

(A) Groundwater systems shall take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment (hereafter called a sampling point). The system shall take one sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(B) Surface water systems shall take a minimum of one sample at every entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment (hereafter called a sampling point). The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant. For purposes of this paragraph, surface water systems include systems with a combination of surface and ground sources.

(C) If a system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water is representative of all sources being used).

(D) The Director may reduce the total number of samples which must be analyzed by allowing the use of compositing. Compositing of samples must be done by certified laboratory personnel. Composite samples from a maximum of five samples are allowed, provided that if the lead concentration in the composite sample is greater than or equal to 0.001 mg/L or the copper concentration is greater than or equal to 0.160 mg/L, then either:

(I) A follow up sample shall be taken and analyzed within 14 days at each sampling point included in the composite; or

(II) If duplicates of or sufficient quantities from the original samples from each sampling point used in the composite are available, the system may use these instead of resampling.

(ii) Where the results of sampling indicate an exceedance of maximum permissible source water levels established under R309-210-6(4)(b)(ii)(D), the Director may require that one additional sample be collected as soon as possible after the initial sample was taken (but not to exceed two weeks) at the same sampling point. If a confirmation sample is taken for lead or copper, then the results of the initial and confirmation sample shall be averaged in determining compliance with the specified maximum permissible levels. Any sample value below the detection limit shall be considered to be zero. Any value above the detection limit but below the PQL shall either be considered as the measured value or be considered one-half the PQL.

(b) Monitoring frequency after system exceeds tap water action level.

Any system which exceeds the lead or copper action level at the tap shall collect one source water sample from each entry point to the distribution system no later than six months after the end of the monitoring period during which the lead or copper action level was exceeded. For monitoring periods that are annual or less frequent, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs, or if the Director has established an alternate monitoring period, the last day of that period.

(c) Monitoring frequency after installation of source water treatment.

Any system which installs source water treatment pursuant to R309-210-6(4)(b)(i)(C) shall collect an additional source water sample from each entry point to the distribution system during two consecutive six-month monitoring periods by the deadline specified in R309-210-6(4)(b)(i)(D).

(d) Monitoring frequency after Director specifies maximum permissible source water levels or determines that source water treatment is not needed

(i) A system shall monitor at the frequency specified below in cases where the Director specifies maximum permissible source water levels under R309-210-6(4)(b)(ii)(D) or determines that the system is not required to install source water treatment under R309-210-6(4)(b)(ii)(B).

(A) A water system using only groundwater shall collect samples once during the three-year compliance period in effect when the applicable determination under R309-210-6(6)(d)(i) is made. Such systems shall collect samples once during each subsequent compliance period. Triennial samples shall be collected every third calendar year.

(B) A water system using surface water (or a combination of surface and ground water) shall collect samples once during each calendar year, the first annual monitoring period to begin during the year in which the

applicable Director determination is made under paragraph (d)(i) of this section.

(ii) A system is not required to conduct source water sampling for lead and/or copper if the system meets the action level for the specific contaminant in tap water samples during the entire source water sampling period applicable to the system under R309-210-6(6)(d)(i)(A) or (B).

(e) Reduced monitoring frequency

(i) A water system using only ground water may reduce the monitoring frequency for lead and copper in source water to once during each nine-year compliance cycle (as that term is defined in R309-110-4) provided that the samples are collected no later than every ninth calendar year and if the system meets one of the following criteria:

(A) The system demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the Director in R309-210-6(4)(b)(ii)(D) during at least three consecutive compliance periods under paragraph (d)(i) of this section; or

(B) The Director has determined that source water treatment is not needed and the system demonstrates that, during at least three consecutive compliance periods in which sampling was conducted under paragraph (d)(i) of this section, the concentration of lead in source water was less than or equal to 0.005 mg/L and the concentration of copper in source water was less than or equal to 0.65 mg/L.

(ii) A water system using surface water (or a combination of surface water and ground water) may reduce the monitoring frequency in paragraph (d)(i) of this section to once during each nine-year compliance cycle (as that term is defined in R309-110-4) provided that the samples are collected no later than every ninth calendar year and if the system meets one of the following criteria:

(A) The system demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the Director in R309-210-6(4)(b)(ii)(D) for at least three consecutive years; or

(B) The Director has determined that source water treatment is not needed and the system demonstrates that, during at least three consecutive years, the concentration of lead in source water was less than or equal to 0.005 mg/L and the concentration of copper in source water was less than or equal to 0.65 mg/L.

(iii) A water system that uses a new source of water is not eligible for reduced monitoring for lead and/or copper until concentrations in samples collected from the new source during three consecutive monitoring periods are below the maximum permissible lead and copper concentrations specified by the Director in R309-210-6(4)(b)(i)(E).

(iv) The Director has the authority to allow the use of previously collected monitoring data for purposes of monitoring, if the data were collected in accordance with this section and analyzed in accordance with R309-104-8.

(7) Public education and supplemental monitoring requirements.

All water systems must deliver a consumer notice of lead tap water monitoring results to persons served by the water system at sites that are tested, as specified in paragraph (d) of this section. A water system that exceeds the lead action level based on tap water samples collected in accordance with R309-210-6(3) shall deliver the public education materials contained in paragraph (a) of this section in accordance with the requirements in paragraph (b) of this section. Water systems that exceed the lead action level must sample the tap water of any customer who requests it in accordance with paragraph (c) of this section.

(a) Content of written public education materials.

(i) Community water systems and Non-transient non-community water systems. Water systems must include the following elements in printed materials (e.g., brochures and pamphlets) in the same order as listed below. In addition, paragraphs (a)(i)(A) through (B) and (a)(i)(F) must be included in the materials, exactly as written, except for the text in brackets in these paragraphs for which the water system must include system-specific information. Any additional information presented by a water system must be consistent with the information below and be in plain language that can be understood by the general public. Water systems must submit all written public education materials to the Director prior to delivery. The Director may require the system to obtain approval of the content of written public materials prior to delivery.

(A) IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER. (INSERT NAME OF WATER SYSTEM) found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

(B) Health effects of lead. Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

(C) Sources of Lead.

(I) Explain what lead is.

(II) Explain possible sources of lead in drinking water and how lead enters drinking water. Include information on home/building plumbing materials and service lines that may contain lead.

(III) Discuss other important sources of lead exposure in addition to drinking water (e.g., paint).

(D) Discuss the steps the consumer can take to reduce their exposure to lead in drinking water.

(I) Encourage running the water to flush out the lead.

(II) Explain concerns with using hot water from the tap and specifically caution against the use of hot water for preparing baby formula.

(III) Explain that boiling water does not reduce lead levels.

(IV) Discuss other options consumers can take to reduce exposure to lead in drinking water, such as alternative sources or treatment of water.

(V) Suggest that parents have their child's blood tested for lead.

(E) Explain why there are elevated levels of lead in the system's drinking water (if known) and what the water system is doing to reduce the lead levels in homes/buildings in this area.

(F) For more information, call us at (INSERT YOUR NUMBER) ((IF APPLICABLE), or visit our Web site at (INSERT YOUR WEB SITE HERE)). For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at

"<http://frwebgate.access.gpo.gov/cgi-bin/leaving.cgi?from=leavingFR.html&log=linklog&to=http://www.epa.gov/lead>" or contact your health care provider.

(ii) Community water systems. In addition to including

the elements specified in paragraph (a)(i) of this section, community water systems must:

(A) Tell consumers how to get their water tested.

(B) Discuss lead in plumbing components and the difference between low lead and lead free.

(b) Delivery of public education materials.

(i) For public water systems serving a large proportion of non-English speaking consumers, as determined by the Director, the public education materials must contain information in the appropriate language(s) regarding the importance of the notice or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the public education materials or to request assistance in the appropriate language.

(ii) A community water system that exceeds the lead action level on the basis of tap water samples collected in accordance with R309-210-6(3), and that is not already conducting public education tasks under this section, must conduct the public education tasks under this section within 60 days after the end of the monitoring period in which the exceedance occurred:

(A) Deliver printed materials meeting the content requirements of paragraph (a) of this section to all bill paying customers.

(B)(I) Contact customers who are most at risk by delivering education materials that meet the content requirements of paragraph (a) of this section to local public health agencies even if they are not located within the water system's service area, along with an informational notice that encourages distribution to all the organization's potentially affected customers or community water system's users. The water system must contact the local public health agencies directly by phone or in person. The local public health agencies may provide a specific list of additional community based organizations serving target populations, which may include organizations outside the service area of the water system. If such lists are provided, systems must deliver education materials that meet the content requirements of paragraph (a) of this section to all organizations on the provided lists.

(II) Contact customers who are most at risk by delivering materials that meet the content requirements of paragraph (a) of this section to the following organizations listed in aa through ff that are located within the water system's service area, along with an informational notice that encourages distribution to all the organization's potentially affected customers or community water system's users:

(aa) Public and private schools or school boards.

(bb) Women Infants and Children (WIC) and Head Start programs.

(cc) Public and private hospitals and medical clinics.

(dd) Pediatricians.

(ee) Family planning clinics.

(ff) Local welfare agencies.

(III) Make a good faith effort to locate the following organizations within the service area and deliver materials that meet the content requirements of paragraph (a) of this section to them, along with an informational notice that encourages distribution to all potentially affected customers or users. The good faith effort to contact at-risk customers may include requesting a specific contact list of these organizations from the local public health agencies, even if the agencies are not located within the water system's service area:

(aa) Licensed childcare centers.

(bb) Public and private preschools.

(cc) Obstetricians-Gynecologists and Midwives.

(C) No less often than quarterly, provide information on or in each water bill as long as the system exceeds the action

level for lead. The message on the water bill must include the following statement exactly as written except for the text in brackets for which the water system must include system-specific information: (INSERT NAME OF WATER SYSTEM) found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call (INSERT NAME OF WATER SYSTEM) (or visit (INSERT YOUR WEB SITE HERE)). The message or delivery mechanism can be modified in consultation with the Director; specifically, the Director may allow a separate mailing of public education materials to customers if the water system cannot place the information on water bills.

(D) Post material meeting the content requirements of paragraph (a) of this section on the water system's Web site if the system serves a population greater than 100,000.

(E) Submit a press release to newspaper, television and radio stations.

(F) In addition to paragraphs (b)(ii)(A) through (E) of this section, systems must implement at least three activities from one or more categories listed below. The educational content and selection of these activities must be determined in consultation with the Director.

(I) Public Service Announcements.

(II) Paid advertisements.

(III) Public Area Information Displays.

(IV) Emails to customers.

(V) Public Meetings.

(VI) Household Deliveries.

(VII) Targeted Individual Customer Contact.

(VIII) Direct material distribution to all multi-family homes and institutions.

(VIII) Other methods approved by the Director.

(G) For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs, or, if the Director has established an alternate monitoring period, the last day of that period.

(iii) As long as a community water system exceeds the action level, it must repeat the activities pursuant to paragraph (b)(ii) of this section as described in paragraphs (b)(iii)(A) through (D) of this section.

(A) A community water system shall repeat the tasks contained in paragraphs (b)(ii)(A), (B) and (F) of this section every 12 months.

(B) A community water system shall repeat tasks contained in paragraph (b)(ii)(C) of this section with each billing cycle.

(C) A community water system serving a population greater than 100,000 shall post and retain material on a publicly accessible Web site pursuant to paragraph (b)(ii)(D) of this section.

(D) The community water system shall repeat the task in paragraph (b)(ii)(E) of this section twice every 12 months on a schedule agreed upon with the Director. The Director can allow activities in paragraph (b)(ii) of this section to extend beyond the 60-day requirement if needed for implementation purposes on a case-by-case basis; however, this extension must be approved in writing by the Director in advance of the 60-day deadline.

(iv) Within 60 days after the end of the monitoring period in which the exceedance occurred (unless it already is repeating public education tasks pursuant to paragraph (b)(v) of this section), a non-transient non-community water system shall deliver the public education materials specified by paragraph (a) of this section as follows:

(A) Post informational posters on lead in drinking water in a public place or common area in each of the buildings served by the system; and

(B) Distribute informational pamphlets and/or brochures on lead in drinking water to each person served by the non-transient non-community water system. The Director may allow the system to utilize electronic transmission in lieu of or combined with printed materials as long as it achieves at least the same coverage.

(C) For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which the sampling occurs, or, if the Director has established an alternate monitoring period, the last day of that period.

(v) A non-transient non-community water system shall repeat the tasks contained in paragraph (b)(iv) of this section at least once during each calendar year in which the system exceeds the lead action level. The Director can allow activities in (b)(iv) of this section to extend beyond the 60-day requirement if needed for implementation purposes on a case-by-case basis; however, this extension must be approved in writing by the Director in advance of the 60-day deadline.

(vi) A water system may discontinue delivery of public education materials if the system has met the lead action level during the most recent six-month monitoring period conducted pursuant to R309-210-6(3). Such a system shall recommence public education in accordance with this section if it subsequently exceeds the lead action level during any monitoring period.

(vii) A community water system may apply to the Director, in writing, (unless the Director has waived the requirement for prior Director approval) to use only the text specified in paragraph (a)(i) of this section in lieu of the text in paragraphs (a)(i) and (a)(ii) of this section and to perform the tasks listed in paragraphs (b)(iv) and (b)(v) of this section in lieu of the tasks in paragraphs (b)(ii) and (b)(iii) of this section if:

(A) The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to plumbing or installing point of use treatment devices; and

(B) The system provides water as part of the cost of services provided and does not separately charge for water consumption.

(viii) A community water system serving 3,300 or fewer people may limit certain aspects of their public education programs as follows:

(A) With respect to the requirements of paragraph (b)(ii)(F) of this section, a system serving 3,300 or fewer must implement at least one of the activities listed in that paragraph.

(B) With respect to the requirements of paragraph (b)(ii)(B) of this section, a system serving 3,300 or fewer people may limit the distribution of the public education materials required under that paragraph to facilities and organizations served by the system that are most likely to be visited regularly by pregnant women and children.

(C) With respect to the requirements of paragraph (b)(ii)(E) of this section, the Director may waive this requirement for systems serving 3,300 or fewer persons as long as system distributes notices to every household served by the system.

(c) Supplemental monitoring and notification of results. A water system that fails to meet the lead action level on the basis of tap samples collected in accordance with R309-210-6(3) shall offer to sample the tap water of any customer who requests it. The system is not required to pay for collecting or analyzing the sample, nor is the system required to collect and analyze the sample itself.

(d) Notification of results.

(i) Reporting requirement. All water systems must provide a notice of the individual tap results from lead tap

water monitoring carried out under the requirements of R309-210-6(3) to the persons served by the water system at the specific sampling site from which the sample was taken (e.g., the occupants of the residence where the tap was tested).

(ii) Timing of notification. A water system must provide the consumer notice as soon as practical, but no later than 30 days after the system learns of the tap monitoring results.

(iii) Content. The consumer notice must include the results of lead tap water monitoring for the tap that was tested, an explanation of the health effects of lead, list steps consumers can take to reduce exposure to lead in drinking water and contact information for the water utility. The notice must also provide the maximum contaminant level goal and the action level for lead and the definitions for these two terms from R309-225-5(3).

(iv) Delivery. The consumer notice must be provided to persons served at the tap that was tested, either by mail or by another method approved by the Director. For example, upon approval by the Director, a non-transient non-community water system could post the results on a bulletin board in the facility to allow users to review the information. The system must provide the notice to customers at sample taps tested, including consumers who do not receive water bills.

(8) Reporting requirements.

All water systems shall report all of the following information to the Director in accordance with this section.

(a) Reporting requirements for tap water monitoring for lead and copper and for water quality parameter monitoring

(i) Except as provided in paragraph (a)(i)(H) of this section, a water system shall report the information specified below for all tap water samples specified in R309-210-6(3) and for all water quality parameter samples specified in R309-210-6(5) within the first 10 days following the end of each applicable monitoring period specified in R309-210-6(3) and (5) (i.e., every six months, annually, every 3 years, or every 9 years). For monitoring periods with a duration less than six months, the end of the monitoring period is the last date samples can be collected during that period as specified in R309-210-6(3) and R309-210-6(5).

(A) the results of all tap samples for lead and copper including the location of each site and the criteria under R309-210-6(3)(a)(iii), (iv), (v), (vi), and (vii) under which the site was selected for the system's sampling pool;

(B) Documentation for each tap water lead or copper sample for which the water system request invalidation pursuant to R309-210-6(3)(f)(ii);

(D) the 90th percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period, (calculated in accordance with R309-200-5(2)(c)) unless the Director calculates the system's 90th percentile lead and copper levels under paragraph (h) of this section;

(E) with the exception of initial tap sampling conducted pursuant to R309-210-6(3)(d)(i), the system shall designate any site which was not sampled during previous monitoring periods, and include an explanation of why sampling sites have changed;

(F) the results of all tap samples for pH, and where applicable, alkalinity, calcium, conductivity, temperature, and orthophosphate or silica collected under R309-210-6(5)(b) through (e);

(G) the results of all samples collected at the entry point(s) to the distribution system for applicable water quality parameters under R309-210-6(5)(b) through (e).

(H) A water system shall report the results of all water quality parameter samples collected under R309-210-6(5)(c) through (f) during each six month monitoring period specified in R309-210-6(5)(d) within the first 10 days following the end of the monitoring period unless the Director has specified

a more frequent reporting requirement.

(ii) For a non-transient non-community water system, or a community water system meeting the criteria of R309-210-6(7)(b)(vii), that does not have enough taps that can provide first draw samples, the system must identify, in writing, each site that did not meet the six hour minimum standing time and the length of standing time for that particular substitute sample collected pursuant to R309-210-6(3)(b)(v) and include this information with the lead and copper tap sample results required to be submitted pursuant to paragraph (a)(i)(A) of this section. The Director has waived prior Director approval of non-first-draw samples sites selected by the system pursuant to R309-210-6(3)(b)(v).

(iii) At a time specified by the Director, or if no specific time is designated by the Director, then as early as possible prior to the addition of a new source or any long-term change in water treatment, a water system deemed to have optimized corrosion control under R309-210-6(2)(b)(iii), a water system subject to reduced monitoring pursuant to R309-210-6(3)(d)(iv), or a water system subject to a monitoring waiver pursuant to R309-210-6(3)(g), shall submit written documentation to the Director describing the change or addition. The Director must review and approve the addition of a new source or long-term change in treatment before it is implemented by the water system. Examples of long-term treatment changes include the addition of a new treatment process or modification of an existing treatment process. Examples of modifications include switching secondary disinfectants, switching coagulants (e.g., alum to ferric chloride), and switching corrosion inhibitor products (e.g., orthophosphate to blended phosphate). Long-term changes can include dose changes to existing chemicals if the system is planning long-term changes to its finished water pH or residual inhibitor concentration. Long-term treatment changes would not include chemical dose fluctuations associated with daily raw water quality changes.

(iv) Any small system applying for a monitoring waiver under R309-210-6(3)(g), or subject to a waiver granted pursuant to R309-210-6(3)(g)(iii), shall provide the following information to the Director in writing by the specified deadline:

(A) By the start of the first applicable monitoring period in R309-210-6(3), any small system applying for a monitoring waiver shall provide the documentation required to demonstrate that it meets the waiver criteria of R309-210-6(3)(g)(i) and (ii).

(B) No later than nine years after the monitoring previously conducted pursuant to R309-210-6(3)(g)(ii) or (g)(iv)(A), each small system desiring to maintain its monitoring waiver shall provide the information required by R309-210-6(3)(g)(iv)(A) and (B).

(C) No later than 60 days after it becomes aware that it is no longer free of lead-containing or copper containing material, as appropriate, each small system with a monitoring waiver shall provide written notification to the Director, setting forth the circumstances resulting in the lead containing or copper containing materials being introduced into the system and what corrective action, if any, the system plans to remove these materials

(D) By October 10, 2000, any small system with a waiver granted prior to April 11, 2000 and that has not previously met the requirements of R309-210-6(3)(g)(ii) shall provide the information required by that paragraph.

(v) Each ground water system that limits water quality parameter monitoring to a subset of entry points under R309-210-6(5)(c)(iii) shall provide, by the commencement of such monitoring, written correspondence to the Director that identifies the selected entry points and includes information sufficient to demonstrate that the sites are representative of

water quality and treatment conditions throughout the system.

(b) Source water monitoring reporting requirements

(i) A water system shall report the sampling results for all source water samples collected in accordance with R309-210-6(6) within the first 10 days following the end of each source water monitoring period (i.e., annually, per compliance period, per compliance cycle) specified in R309-210-6(6).

(ii) With the exception of the first round of source water sampling conducted pursuant to R309-210-6(6)(b), the system shall specify any site which was not sampled during previous monitoring periods, and include an explanation of why the sampling point has changed.

(c) Corrosion control treatment reporting requirements

By the applicable dates under R309-210-6(2), systems shall report the following information:

(i) for systems demonstrating that they have already optimized corrosion control, information required in R309-210-6(2)(b)(ii) or R309-210-6(2)(b)(iii).

(ii) for systems required to optimize corrosion control, their recommendation regarding optimal corrosion control treatment under R309-210-6(4)(a)(i).

(iii) for systems required to evaluate the effectiveness of corrosion control treatments under R309-210-6(4)(a)(iii), the information required by that paragraph.

(iv) for systems required to install optimal corrosion control designated by the Director under R309-210-6(4)(a)(iv), a letter certifying that the system has completed installing that treatment.

(d) Source water treatment reporting requirements

By the applicable dates in R309-210-6(4)(b), systems shall provide the following information to the Director :

(i) if required under R309-210-6(4)(b)(ii)(A), their recommendation regarding source water treatment;

(ii) for systems required to install source water treatment under R309-210-6(4)(b)(ii)(B), a letter certifying that the system has completed installing the treatment designated by the Director within 24 months after the Director designated the treatment.

(e) Lead service line replacement reporting requirements

Systems shall report the following information to the Director to demonstrate compliance with the requirements of R309-210-6(4)(c):

(i) No later than 12 months after the end of a monitoring period in which a system exceeds the lead action level in sampling referred to in R309-210-6(4)(c)(i), the system must submit written documentation to the Director of the material evaluation conducted as required in R309-210-6(3)(a), identify the initial number of lead service lines in its distribution system at the time the system exceeds the lead action level, and provide the system's schedule for annually replacing at least 7 percent of the initial number of lead service lines in its distribution system.

(ii) No later than 12 months after the end of a monitoring period in which a system exceeds the lead action level in sampling referred to in R309-210-6(4)(c)(i), and every 12 months thereafter, the system shall demonstrate to the Director in writing that the system has either:

(A) replaced in the previous 12 months at least 7 percent of the initial lead service lines (or a greater number of lines specified by the Director under R309-210-6(4)(c)(v)) in its distribution system, or

(B) conducted sampling which demonstrates that the lead concentration in all service line samples from an individual line(s), taken pursuant to R309-210-6(3)(b)(iii), is less than or equal to 0.015 mg/L. In such cases, the total number of lines replaced and/or which meet the criteria in R309-210-6(4)(c)(iii) shall equal at least 7 percent of the initial number of lead lines identified under paragraph (e)(i) of this section (or the percentage specified by the Director

under R309-210-6(4)(c)(v)).

(iii) The annual letter submitted to the Director under R309-210-6(8)(e)(ii) shall contain the following information:

(A) the number of lead service lines scheduled to be replaced during the previous year of the system's replacement schedule;

(B) the number and location of each lead service line replaced during the previous year of the system's replacement schedule;

(C) if measured, the water lead concentration and location of each lead service line sampled, the sampling method, and the date of sampling.

(iv) Systems shall also report any additional information as specified by the Director, and in a time and manner prescribed by the Director, to verify that all partial lead service line replacement activities have taken place.

(f) Public education program reporting requirements

(i) Any water system that is subject to the public education requirements in R309-210-6(7) shall, within ten days after the end of each period in which the system is required to perform public education in accordance with R309-210-6(7)(b), send written documentation to the Director that contains:

(A) A demonstration that the system has delivered the public education materials that meet the content requirements in R309-210-6(7)(a) and the delivery requirements in R309-210-6(7)(b); and

(B) A list of all the newspapers, radio stations, television stations, and facilities and organizations to which the system delivered public education materials during the period in which the system was required to perform public education tasks.

(ii) Unless required by the Director, a system that previously has submitted the information required by paragraph (f)(i)(B) of this section, as long as there have been no changes in the distribution list and the system certifies that the public education materials were distributed to the same list submitted previously.

(iii) No later than 3 months following the end of the monitoring period, each system must mail a sample copy of the consumer notification of tap results to the Director along with a certification that the notification has been distributed in a manner consistent with the requirements of R309-210-6(7)(d).

(g) Reporting of additional monitoring data

Any system which collects sampling data in addition to that required by this subpart shall report the results to the Director within the first ten day following the end of the applicable monitoring period under R309-210-6(3), R309-210-6(5) and R309-210-6(6) during which the samples are collected.

(h) Reporting of 90th percentile lead and copper concentrations where the Director calculates a system's 90th percentile concentrations. A water system is not required to report the 90th percentile lead and copper concentrations measured from among all lead and copper tap water samples during each monitoring period, as required by paragraph (a)(i)(D) of this section if:

(i) The Director has previously notified the water system that it will calculate the water system's 90th percentile lead and copper concentrations, based on the lead and copper tap results submitted pursuant to paragraph (h)(ii)(A) of this section, and has specified a date before the end of the applicable monitoring period by which the system must provide the results of lead and copper tap water samples;

(ii) The system has provided the following information to the Director by the date specified in paragraph (h)(i) of this section:

(A) The results of all tap samples for lead and copper

including the location of each site and the criteria under R309-210-6(3)(a)(iii), (iv), (v), (vi), and/or (vii) under which the site was selected for the system's sampling pool, pursuant to paragraph (a)(i)(A) of this section; and

(B) An identification of sampling sites utilized during the current monitoring period that were not sampled during previous monitoring periods, and an explanation why sampling sites have changed; and

(iii) The Director has provided the results of the 90th percentile lead and copper calculations, in writing, to the water system before the end of the monitoring period.

R309-210-7. Asbestos Distribution System Monitoring.

(1) The frequency of monitoring conducted to determine compliance with the maximum contaminant level for asbestos specified in R309-200-5(1) shall be conducted as follows:

(a) Each community and non-transient non-community water system is required to monitor for asbestos during the first three-year compliance period of each nine-year compliance cycle beginning in the compliance period starting January 1, 1993.

(b) If the system believes it is not vulnerable due to corrosion of asbestos-cement pipe, it may apply to the Director for a waiver of the monitoring requirement in paragraph (a) of this section. If the Director grants the waiver, the system is not required to monitor for asbestos.

(c) The Director may grant a waiver based on a consideration of the use of asbestos-cement pipe for finished water distribution and the corrosive nature of the water.

(d) A waiver remains in effect until the completion of the three-year compliance period. Systems not receiving a waiver must monitor in accordance with the provisions of paragraph (a) of this section.

(2) A system vulnerable to asbestos contamination due solely to corrosion of asbestos-cement pipe shall take one sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

(3) A system vulnerable to asbestos contamination due both to its source water supply (as specified in R309-205-5(2)) and corrosion of asbestos-cement pipe shall take one sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

(4) A system which exceeds the maximum contaminant levels as determined in R309-205-5(1)(g) shall monitor quarterly beginning in the next quarter after the violation occurred.

(5) The Director may decrease the quarterly monitoring requirement to the frequency specified in paragraph (a) of this section provided the Director has determined that the system is reliably and consistently below the maximum contaminant level. In no case can the Director make this determination unless a groundwater system takes a minimum of two quarterly samples and a surface (or combined surface/ground) water system takes a minimum of four quarterly samples.

(6) If monitoring data collected after January 1, 1990 are generally consistent with the requirements of R309-210-7, then the Director may allow systems to use that data to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

R309-210-8. Disinfection Byproducts - Stage 1 Requirements.

(1) General requirements. The requirements in this sub-section establish criteria under which community and non-transient non-community water systems that add a chemical disinfectant to the water in any part of the drinking water treatment process, shall modify their practices to meet MCLs

and MRDLs in R309-200-5(3)(c) and meet treatment technique requirements in R309-215-12 and 13. The requirements of this sub-section also establish criteria under which transient non-community water systems that use chlorine dioxide shall modify their practices to meet MRDLs for chlorine dioxide in R309-200-5(3)(c).

(a) Compliance dates.

(i) Community and Non-transient non-community water systems. Surface water systems serving 10,000 or more persons must comply with this section beginning January 1, 2002. Surface water systems serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water must comply with this section beginning January 1, 2004.

(ii) Transient non-community water systems. Surface water systems serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with any requirements for chlorine dioxide in this section beginning January 1, 2002. Surface water systems serving fewer than 10,000 persons and using chlorine dioxide as a disinfectant or oxidant and systems using only ground water not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant must comply with any requirements for chlorine dioxide in this section beginning January 1, 2004.

(b) Systems must take all samples during normal operating conditions.

(c) Systems may consider multiple wells drawing water from a single aquifer as one treatment plant for determining the minimum number of TTHM and HAA5 samples required, with approval from the Director.

(d) Failure to monitor in accordance with the monitoring plan required under paragraph (5) of this section is a monitoring violation.

(e) Failure to monitor will be treated as a violation for the entire period covered by the annual average where compliance is based on a running annual average of monthly or quarterly samples or averages and the system's failure to monitor makes it impossible to determine compliance with MCLs or MRDLs.

(f) Systems may use only data collected under the provisions of this section or the federal Information Collection Rule, (40 CFR, Part 141, Subpart M) to qualify for reduced monitoring.

(2) Monitoring requirements for disinfection byproducts.

(a) TTHMs and HAA5s

(i) Routine monitoring. Systems must monitor at the frequency indicated in the following:

(A) If a system elects to sample more frequently than the minimum required, at least 25 percent of all samples collected each quarter (including those taken in excess of the required frequency) must be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples must be taken at locations representative of at least average residence time in the distribution system.

(B) Surface water systems serving at least 10,000 persons shall take four water samples per quarter per treatment plant. At least 25 percent of all samples collected each quarter shall be at locations representing maximum residence time. The remaining samples taken at locations representative of at least average residence time in the distribution system and representing the entire distribution system, taking into account number of persons served, different sources of water, and different treatment methods.

(C) Surface water systems serving from 500 to 9,999 persons shall take one water sample per quarter per treatment plant at a locations representing maximum residence time.

(D) Surface water systems serving fewer than 500 persons shall take one sample per year per treatment plant during month of warmest water temperature at a location representing maximum residence time. If the sample (or average of annual samples, if more than one sample is taken) exceeds the MCL, the system must increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until the system meets reduced monitoring criteria in paragraph (2)(a)(v) of this section.

(E) Systems using only ground water not under direct influence of surface water using chemical disinfectant and serving at least 10,000 persons shall take one water sample per quarter per treatment plant at a locations representing maximum residence time.

(F) Systems using only ground water not under direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons shall take one sample per year per treatment plant during month of warmest water temperature at a location representing maximum residence time. If the sample (or average of annual samples, if more than one sample is taken) exceeds the MCL, the system must increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until the system meets criteria in paragraph (2)(a)(v) of this section for reduced monitoring.

(ii) Systems may reduce monitoring, except as otherwise provided, if the system has monitored for at least one year and is in accordance with the following paragraphs. Any Surface water system serving fewer than 500 persons may not reduce its monitoring to less than one sample per treatment plant per year.

(A) A surface water system serving at least 10,000 persons which has a source water annual average TOC level, before any treatment, of less than or equal to 4.0 mg/L and has a TTHM annual average of less than or equal to 0.040 mg/L and has a HAA5 annual average of less than or equal to 0.030 mg/L may reduce monitoring to one sample per treatment plant per quarter at a distribution system location reflecting maximum residence time.

(B) A surface water system serving from 500 to 9,999 persons which has a source water annual average TOC level, before any treatment, of less than or equal to 4.0 mg/L and has a TTHM annual average of less than or equal to 0.040 mg/L and has a HAA5 annual average of less than or equal to 0.030 mg/L may reduce monitoring to one sample per treatment plant per year at a distribution system location reflecting maximum residence time during the month of warmest water temperature.

(C) A system using only ground water not under direct influence of surface water using chemical disinfectant and serving at least 10,000 persons that has a TTHM annual average of less than or equal to 0.040 mg/L and has a HAA5 annual average of less than or equal to 0.030 mg/L may reduce monitoring to one sample per treatment plant per year at a distribution system location reflecting maximum residence time during the month of warmest water temperature.

(D) A system using only ground water not under direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons that has a TTHM annual average of less than or equal to 0.040 mg/L and has a HAA5 annual average of less than or equal to 0.030 mg/L for two consecutive years or has a TTHM annual average of less than or equal to 0.020 mg/L and has a HAA5 annual average of less than or equal to 0.015mg/L for one year may reduce monitoring to one sample per treatment plant per three year monitoring cycle at a distribution system location reflecting maximum residence time during the month of warmest water

temperature, with the three-year cycle beginning on January 1 following the quarter in which the system qualifies for reduced monitoring.

(iii) Monitoring requirements for source water TOC in order to qualify for reduced monitoring for TTHM and HAA5 under paragraph (2)(a)(ii) of this section, surface water systems not monitoring under the provisions of paragraph (d) of this section must take monthly TOC samples every 30 days at a location prior to any treatment, beginning April 1, 2008 or earlier, if specified by the Director. In addition to meeting other criteria for reduced monitoring in paragraph (2)(a)(ii) of this section, the source water TOC running annual average must be equal to or less than 4.0 mg/L (based on the most recent four quarters of monitoring) on a continuing basis at each treatment plant to reduce or remain on reduced monitoring for TTHM and HAA5. Once qualified for reduced monitoring for TTHM and HAA5 under paragraph (2)(a)(ii) of this section, a system may reduce source water TOC monitoring to quarterly TOC samples taken every 90 days at a location prior to any treatment.

(iv) Systems on a reduced monitoring schedule may remain on that reduced schedule as long as the average of all samples taken in the year (for systems which must monitor quarterly) or the result of the sample (for systems which must monitor no more frequently than annually) is no more than 0.060 mg/L and 0.045 mg/L for TTHMs and HAA5, respectively. Systems that do not meet these levels must resume monitoring at the frequency identified in paragraph (2)(a)(i) of this section in the quarter immediately following the monitoring period in which the system exceeds 0.060 mg/L or 0.045 mg/L for TTHM or HAA5, respectively. For systems using only ground water not under the direct influence of surface water and serving fewer than 10,000 persons, if either the TTHM annual average is greater than 0.080 mg/L or the HAA5 annual average is greater than 0.060 mg/L, the system must go to the increased monitoring identified in paragraph (2)(a)(i) of this section in the quarter immediately following the monitoring period in which the system exceeds 0.080 mg/L or 0.060 mg/L for TTHMs or HAA5 respectively.

(v) Systems on increased monitoring may return to routine monitoring if, after at least one year of monitoring their TTHM annual average is less than or equal to 0.060 mg/L and their HAA5 annual average is less than or equal to 0.045 mg/L.

(vi) The Director may return a system to routine monitoring when appropriate to protect public health.

(b) Chlorite. Community and non-transient non-community water systems using chlorine dioxide, for disinfection or oxidation, must conduct monitoring for chlorite.

(i) Routine monitoring.

(A) Daily monitoring. Systems must take daily samples at the entrance to the distribution system. For any daily sample that exceeds the chlorite MCL, the system must take additional samples in the distribution system the following day at the locations required by paragraph (2)(b)(ii) of this section, in addition to the sample required at the entrance to the distribution system.

(B) Monthly monitoring. Systems must take a three-sample set each month in the distribution system. The system must take one sample at each of the following locations: near the first customer, at a location representative of average residence time, and at a location reflecting maximum residence time in the distribution system. Any additional routine sampling must be conducted in the same manner (as three-sample sets, at the specified locations). The system may use the results of additional monitoring conducted under paragraph (2)(b)(ii) of this section to meet the requirement for

monitoring in this paragraph.

(ii) Additional monitoring. On each day following a routine sample monitoring result that exceeds the chlorite MCL at the entrance to the distribution system, the system is required to take three chlorite distribution system samples at the following locations: as close to the first customer as possible, in a location representative of average residence time, and as close to the end of the distribution system as possible (reflecting maximum residence time in the distribution system).

(iii) Reduced monitoring.

(A) Chlorite monitoring at the entrance to the distribution system required by paragraph (2)(b)(i)(A) of this section may not be reduced.

(B) Chlorite monitoring in the distribution system required by paragraph (2)(b)(i)(B) of this section may be reduced to one three-sample set per quarter after one year of monitoring where no individual chlorite sample taken in the distribution system under paragraph (2)(b)(i)(B) of this section has exceeded the chlorite MCL and the system has not been required to conduct monitoring under paragraph (2)(b)(ii) of this section. The system may remain on the reduced monitoring schedule until either any of the three individual chlorite samples taken monthly in the distribution system under paragraph (2)(b)(i)(B) of this section exceeds the chlorite MCL or the system is required to conduct monitoring under paragraph (2)(b)(ii) of this section, at which time the system must revert to routine monitoring.

(c) Bromate.

(i) Routine monitoring. Community and nontransient noncommunity systems using ozone, for disinfection or oxidation, must take one sample per month for each treatment plant in the system using ozone. Systems must take samples monthly at the entrance to the distribution system while the ozonation system is operating under normal conditions.

(ii) Reduced monitoring.

(A) Until March 31, 2009, systems required to analyze for bromate may reduce monitoring from monthly to once per quarter, if the system demonstrates that the average source water bromide concentration is less than 0.05 mg/L based upon representative monthly bromide measurements for one year. The system may remain on reduced bromate monitoring until the running annual average source water bromide concentration, computed quarterly, is equal to or greater than 0.05 mg/L based upon representative monthly measurements. If the running annual average source water bromide concentration is greater than or equal to 0.05 mg/L, the system must resume routine monitoring required by paragraph (2)(c)(i) of this section in the following month.

(B) Beginning April 1, 2009, systems may no longer use the provisions of paragraph (2)(c)(ii)(A) of this section to qualify for reduced monitoring. A system required to analyze for bromate may reduce monitoring from monthly to quarterly, if the system's running annual average bromate concentration is equal to or less than 0.0025 mg/L based on monthly bromate measurements under paragraph (2)(c)(i) of this section for the most recent four quarters, with samples analyzed using Method 317.0 Revision 2.0, 326.0 or 321.8. If a system has qualified for reduced bromate monitoring under paragraph (2)(c)(ii)(A) of this section, that system may remain on reduced monitoring as long as the running annual average of quarterly bromate samples is less than or equal to 0.0025 mg/L based on samples analyzed using Method 317.0 Revision 2.0, 326.0 or 321.8. If the running annual average bromate concentration is greater than 0.0025 mg/L, the system must resume routine monitoring required by (2)(c)(i) of this section.

(3) Monitoring requirements for disinfectant residuals.

(a) Chlorine and chloramines.

(i) Routine monitoring. Community and nontransient noncommunity water systems that use chlorine or chloramines must measure the residual disinfectant level in distribution system at the same point in the distribution system and at the same time as total coliforms are sampled, as specified in R309-210-5. The Director may allow a public water system which uses both disinfected and undischarged sources to take disinfectant residual samples at points other than the total coliform sampling points if the Director determines that such sampling points are more representative of treated (disinfected) water quality within the distribution system. Water systems shall take a minimum of three residual disinfectant level samples each week.

(ii) In addition, ground water systems shall take the following readings at each facility a minimum of three times a week: the total volume of water treated; the type and amount of disinfectant used in treating the water (clearly indicating the weight if gas feeders are used, or the percent solution and volume fed if liquid feeders are used); and the setting of the rotometer valve or injector pump. Surface water systems may use the results of residual disinfectant concentration sampling conducted under R309-215-10(3) for systems which filter, in lieu of taking separate samples.

(iii) Reduced monitoring. Monitoring may not be reduced.

(b) Chlorine Dioxide.

(i) Routine monitoring. Community, nontransient noncommunity, and transient noncommunity water systems that use chlorine dioxide for disinfection or oxidation must take daily samples at the entrance to the distribution system. For any daily sample that exceeds the MRDL, the system must take samples in the distribution system the following day at the locations required by paragraph (3)(b)(ii) of this section, in addition to the sample required at the entrance to the distribution system.

(ii) Additional monitoring. On each day following a routine sample monitoring result that exceeds the MRDL, the system is required to take three chlorine dioxide distribution system samples. If chlorine dioxide or chloramines are used to maintain a disinfectant residual in the distribution system, or if chlorine is used to maintain a disinfectant residual in the distribution system and there are no disinfection addition points after the entrance to the distribution system (i.e., no booster chlorination), the system must take three samples as close to the first customer as possible, at intervals of at least six hours. If chlorine is used to maintain a disinfectant residual in the distribution system and there are one or more disinfection addition points after the entrance to the distribution system (i.e., booster chlorination), the system must take one sample at each of the following locations: as close to the first customer as possible, in a location representative of average residence time, and as close to the end of the distribution system as possible (reflecting maximum residence time in the distribution system).

(iii) Reduced monitoring. Chlorine dioxide monitoring may not be reduced.

(4) Bromide. Systems required to analyze for bromate may reduce bromate monitoring from monthly to once per quarter, if the system demonstrates that the average source water bromide concentration is less than 0.05 mg/L based upon representative monthly measurements for one year. The system must continue bromide monitoring to remain on reduced bromate monitoring.

(5) Monitoring plans. Each system required to monitor under this section must develop and implement a monitoring plan. The system must maintain the plan and make it available for inspection by the Director and the general public no later than 30 days following the applicable compliance dates in R309-210-8(1)(a). All Surface water systems serving

more than 3300 people must submit a copy of the monitoring plan to the Director no later than the date of the first report required under R309-105-16(2). The Director may also require the plan to be submitted by any other system. After review, the Director may require changes in any plan elements. The plan must include at least the following elements.

(a) Specific locations and schedules for collecting samples for any parameters included in this subpart.

(b) How the system will calculate compliance with MCLs, MRDLs, and treatment techniques.

(c) If approved for monitoring as a consecutive system, or if providing water to a consecutive system, the Director may modify the monitoring requirements treating the systems as a single distribution system, however, the sampling plan shall reflect the entire distribution system of all interconnected systems.

(6) Compliance requirements.

(a) General requirements.

(i) Where compliance is based on a running annual average of monthly or quarterly samples or averages and the system fails to monitor for TTHM, HAA5, or bromate, this failure to monitor will be treated as a monitoring violation for the entire period covered by the annual average. Where compliance is based on a running annual average of monthly or quarterly samples or averages and the system's failure to monitor makes it impossible to determine compliance with MRDLs for chlorine and chloramines, this failure to monitor will be treated as a monitoring violation for the entire period covered by the annual average.

(ii) All samples taken and analyzed under the provisions of this section shall be included in determining compliance, even if that number is greater than the minimum required.

(iii) If, during the first year of monitoring under R309-210-8, any individual quarter's average will cause the running annual average of that system to exceed the MCL, the system is out of compliance at the end of that quarter.

(b) Disinfection byproducts.

(i) TTHMs and HAA5.

(A) For systems monitoring quarterly, compliance with MCLs in R309-200-5(3)(c) shall be based on a running annual arithmetic average, computed quarterly, of quarterly arithmetic averages of all samples collected by the system as prescribed by R309-210-8(2)(a).

(B) For systems monitoring less frequently than quarterly, systems demonstrate MCL compliance if the average of samples taken that year under the provisions of R309-210-8(2)(a) does not exceed the MCLs in R309-200-5(3)(c). If the average of these samples exceeds the MCL, the system shall increase monitoring to once per quarter per treatment plant and such a system is not in violation of the MCL until it has completed one year of quarterly monitoring, unless the result of fewer than four quarters of monitoring will cause the running annual average to exceed the MCL, in which case the system is in violation at the end of that quarter. Systems required to increase monitoring frequency to quarterly monitoring shall calculate compliance by including the sample which triggered the increased monitoring plus the following three quarters of monitoring.

(C) If the running annual arithmetic average of quarterly averages covering any consecutive four-quarter period exceeds the MCL, the system is in violation of the MCL and shall notify the public pursuant to R309-220, in addition to reporting to the Director pursuant to R309-105-16.

(D) If a PWS fails to complete four consecutive quarters of monitoring, compliance with the MCL for the last four-quarter compliance period shall be based on an average of the available data.

(ii) Chlorite. Compliance shall be based on an

arithmetic average of each three sample set taken in the distribution system as prescribed by R309-210-8(2)(b)(i)(B) and (2)(b)(ii). If the arithmetic average of any three sample sets exceeds the MCL, the system is in violation of the MCL and shall notify the public pursuant to R309-220, in addition to reporting to the Director pursuant to R309-105-16.

(iii) Bromate. Compliance shall be based on a running annual arithmetic average, computed quarterly, of monthly samples (or, for months in which the system takes more than one sample, the average of all samples taken during the month) collected by the system as prescribed by R309-210-8(2)(c). If the average of samples covering any consecutive four-quarter period exceeds the MCL, the system is in violation of the MCL and shall notify the public pursuant to R309-220, in addition to reporting to the Director pursuant to R309-105-16. If a PWS fails to complete 12 consecutive months' monitoring, compliance with the MCL for the last four-quarter compliance period shall be based on an average of the available data.

(c) Disinfectant residuals.

(i) Chlorine and chloramines.

(A) Compliance shall be based on a running annual arithmetic average, computed quarterly, of monthly averages of all samples collected by the system under R309-210-8(3)(a). If the average covering any consecutive four-quarter period exceeds the MRDL, the system is in violation of the MRDL and shall notify the public pursuant to R309-220, in addition to reporting to the Director pursuant to R309-105-16.

(B) In cases where systems switch between the use of chlorine and chloramines for residual disinfection during the year, compliance shall be determined by including together all monitoring results of both chlorine and chloramines in calculating compliance. Reports submitted pursuant to R309-105-16 shall clearly indicate which residual disinfectant was analyzed for each sample.

(ii) Chlorine dioxide.

(A) Acute violations. Compliance shall be based on consecutive daily samples collected by the system under R309-210-8(3)(b). If any daily sample taken at the entrance to the distribution system exceeds the MRDL, and on the following day one (or more) of the three samples taken in the distribution system exceed the MRDL, the system is in violation of the MRDL and shall take immediate corrective action to lower the level of chlorine dioxide below the MRDL and shall notify the public pursuant to the procedures for acute health risks in R309-220-5. Failure to take samples in the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system will also be considered an MRDL violation and the system shall notify the public of the violation in accordance with the provisions for acute violations under R309-220-5 in addition to reporting to the Director pursuant to R309-105-16.

(B) Nonacute violations. Compliance shall be based on consecutive daily samples collected by the system under R309-210-8(3)(b). If any two consecutive daily samples taken at the entrance to the distribution system exceed the MRDL and all distribution system samples taken are below the MRDL, the system is in violation of the MRDL and shall take corrective action to lower the level of chlorine dioxide below the MRDL at the point of sampling and will notify the public pursuant to the procedures for nonacute health risks in R309-220-6 in addition to reporting to the Director pursuant to R309-105-16. Failure to monitor at the entrance to the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system is also an MRDL violation and the system shall notify the public of the violation in accordance with the provisions for nonacute violations under R309-220-6 in addition to

reporting to the Director pursuant to R309-105-16.

R309-210-9. Disinfection Byproducts - Initial Distribution System Evaluations.

(1) General requirements.

(a) The requirements of this sub-section establish monitoring and other requirements for identifying R309-210-10 compliance monitoring locations for determining compliance with maximum contaminant levels for total trihalomethanes (TTHM) and haloacetic acids (five)(HAA5). The water system must use an Initial Distribution System Evaluation (IDSE) to determine locations with representative high TTHM and HAA5 concentrations throughout the distribution system. IDSEs are used in conjunction with, but separate from, R309-210-8 compliance monitoring, to identify and select R309-210-10 compliance monitoring locations.

(b) Applicability. Community water systems that uses a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light; or if the system is a non-transient non-community water systems that serves at least 10,000 people and uses a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light are subject to these requirements.

(c) Schedule. The water system must comply with the requirements of this subpart on the schedule in paragraph (c)(i).

(i) For water systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system.

(A) For water systems that serve a population greater than or equal to 100,000:

(I) The water system must submit a standard monitoring plan or system specific study plan or 40/30 certification to the Director by or receive very small system waiver from the Director by October 1, 2006.

(II) The water system must complete the standard monitoring or system specific study by September 30, 2008.

(III) The water system must submit the IDSE report to the Director by January 1, 2009.

(B) For water systems that serve a population from 50,000 to 99,999:

(I) The water system must submit a standard monitoring plan or system specific study plan or 40/30 certification to the Director by or receive very small system waiver from the Director by April 1, 2007.

(II) The water system must complete the standard monitoring or system specific study by March 31, 2009.

(III) The water system must submit the IDSE report to the Director by July 1, 2009.

(C) For water systems that serve a population from 10,000 to 49,999:

(I) The water system must submit a standard monitoring plan or system specific study plan or 40/30 certification to the Director by or receive very small system waiver from the Director by October 1, 2007.

(II) The water system must complete the standard monitoring or system specific study by September 30, 2009.

(III) The water system must submit the IDSE report to the Director by January 1, 2010.

(D) For community water systems that serve a population less than 10,000:

(I) The water system must submit a standard monitoring plan or system specific study plan or 40/30 certification to the Director by or receive very small system waiver from the Director by April 1, 2008.

(II) The water system must complete the standard monitoring or system specific study by March 31, 2010.

(III) The water system must submit the IDSE report to the Director by July 1, 2010.

(ii) For other water systems that are part of a combined distribution system:

(A) For wholesale systems or consecutive systems:

(I) The water system must submit a standard monitoring plan or system specific study plan or 40/30 certification to the Director by or receive very small system waiver from the Director at the same time as the system with the earliest compliance date in the combined distribution system.

(II) The water system must complete the standard monitoring or system specific study at the same time as the system with the earliest compliance date in the combined distribution system.

(III) The water system must submit the IDSE report to the Director by at the same time as the system with the earliest compliance date in the combined distribution system.

(iii) If, within 12 months after the date the water system is required to submit the information in (i)(A)(I), (B)(I), (C)(I), (D)(I) and (ii)(A)(I) above, the Director does not approve the water system plan or notify the water system that it has not yet completed its review, the water system may consider the plan that was submitted as approved. The water system must implement that plan and must complete standard monitoring or a system specific study no later than the date identified in (i)(A)(II), (B)(II), (C)(II), (D)(II) and (ii)(A)(II) above.

(iv) The water system must submit the 40/30 certification under R309-210-9(4) by the date identified in (i)(A)(II), (B)(II), (C)(II), (D)(II) and (ii)(A)(II) above.

(v) If, within three months after the date identified in (i)(A)(III), (B)(III), (C)(III), (D)(III) and (ii)(A)(III) above (nine months after the date identified in this column if the water system must comply on the schedule in paragraph (c)(i)(C) of this section), the Director does not approve the IDSE report or notify the water system that it has not yet completed its review, the water system may consider the report submitted as approved and must implement the recommended R309-210-10 monitoring as required.

(vi) For the purpose of the schedule in paragraph (c)(i) through (c)(v) of this section, the Director may determine that the combined distribution system does not include certain consecutive systems based on factors such as receiving water from a wholesale system only on an emergency basis or receiving only a small percentage and small volume of water from a wholesale system. The Director may also determine that the combined distribution system does not include certain wholesale systems based on factors such as delivering water to a consecutive system only on an emergency basis or delivering only a small percentage and small volume of water to a consecutive system.

(d) The water system must conduct standard monitoring that meets the requirements in R309-210-9(2), or a system specific study that meets the requirements in R309-210-9(3), or certify to the Director that the water system meet 40/30 certification criteria under R309-210-9(4), or qualify for a very small system waiver under R309-210-9(5).

(i) The water system must have taken the full complement of routine TTHM and HAA5 compliance samples required of a system with the population and source water under R309-210-8 (or the water system must have taken the full complement of reduced TTHM and HAA5 compliance samples required of a system with the population and source water under R309-210-8 if the water system meets reduced monitoring criteria under R309-210-8) during the period specified in R309-210-9(4)(a) to meet the 40/30 certification criteria in R309-210-9(4) the water system must have taken TTHM and HAA5 samples under R309-200-4(3) and R309-210-8 to be eligible for the very small system

waiver in R309-210-9(5).

(ii) If the water system has not taken the required samples, the water system must conduct standard monitoring that meets the requirements in R309-210-9(2), or a system specific study that meets the requirements in R309-210-9(3).

(e) The water system must use only the analytical methods specified in R309-200-4(3), or otherwise approved by EPA for monitoring under this subpart, to demonstrate compliance with the requirements of this subpart.

(f) IDSE results will not be used for the purpose of determining compliance with MCLs in R309-200-5(3)(c).

(2) Standard monitoring.

(a) Standard monitoring plan. The standard monitoring plan must comply with paragraphs (a)(i) through (a)(iv) of this section. The water system must prepare and submit the standard monitoring plan to the Director according to the schedule in R309-210-9(1)(c).

(i) The standard monitoring plan must include a schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating locations and dates of all projected standard monitoring, and all projected R309-210-8 compliance monitoring.

(ii) The standard monitoring plan must include justification of standard monitoring location selection and a summary of data the water system relied on to justify standard monitoring location selection.

(iii) The standard monitoring plan must specify the population served and system type (surface water or ground water).

(iv) The water system must retain a complete copy of the standard monitoring plan submitted under this paragraph (a), including any Director modification of the standard monitoring plan, for as long as the water system is required to retain the IDSE report under R309-105-17(8).

(b) Standard monitoring.

(i) The water system must monitor as indicated in paragraph (b)(i). The water system must collect dual sample sets at each monitoring location. One sample in the dual sample set must be analyzed for TTHM. The other sample in the dual sample set must be analyzed for HAA5. The water system must conduct one monitoring period during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature. The water system must review available compliance, study, or operational data to determine the peak historical month for TTHM or HAA5 levels or warmest water temperature.

(A) Surface water systems serving less than 500 population which are consecutive systems.

(I) One monitoring period per year, dual sample sets must be taken during the peak historical month. Two dual samples sets must be collected per monitoring period.

(II) One dual sample set must be taken at the high TTHM location in the distribution system.

(III) One dual sample set must be taken near the entry point of the disinfected water into the distribution system.

(B) Surface water systems serving less than 500 population which are non-consecutive systems.

(I) One monitoring period per year, dual sample sets must be taken during the peak historical month. Two dual samples sets must be collected per monitoring period.

(II) One dual sample set must be taken at the high TTHM location in the distribution system.

(III) One dual sample set must be taken at the high HAA5 location in the distribution system.

(C) Surface water systems serving between 500 to 3,300 population which are consecutive systems.

(I) Four monitoring periods per year, dual sample sets must be taken every 90 days. Two dual samples sets must be

collected per monitoring period.

(II) One dual sample set must be taken at the high TTHM location in the distribution system.

(III) One dual sample set must be taken near the entry point of the disinfected water into the distribution system.

(D) Surface water systems serving between 500 to 3,300 population which are non-consecutive systems.

(I) Four monitoring periods per year, dual sample sets must be taken every 90 days. Two dual samples sets must be collected per monitoring period.

(II) One dual sample set must be taken at the high TTHM location in the distribution system.

(III) One dual sample set must be taken at the high HAA5 location in the distribution system.

(E) Surface water systems serving between 3,301 to 9,999 population.

(I) Four monitoring periods per year, dual sample sets must be taken every 90 days. Four dual samples sets must be collected per monitoring period.

(II) Two dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) One dual sample set must be taken at the high HAA5 location in the distribution system.

(IV) One dual sample set must be taken at an average residence time of the disinfected water in the distribution system.

(F) Surface water systems serving between 10,000 to 49,999 population.

(I) Six monitoring periods per year, dual sample sets must be taken every 60 days. Eight dual samples sets must be collected per monitoring period.

(II) Three dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) Two dual sample sets must be taken at the high HAA5 locations in the distribution system.

(IV) Two dual sample sets must be taken at an average residence time of the disinfected water in the distribution system.

(V) One dual sample set must be taken near the entry point of the disinfected water into the distribution system.

(G) Surface water systems serving between 50,000 to 249,999 population.

(I) Six monitoring periods per year, dual sample sets must be taken every 60 days. 16 dual samples sets must be collected per monitoring period.

(II) Five dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) Four dual sample sets must be taken at the high HAA5 locations in the distribution system.

(IV) Four dual sample sets must be taken at an average residence time of the disinfected water in the distribution system.

(V) Three dual sample sets must be taken near the entry point of the disinfected water into the distribution system.

(H) Surface water systems serving between 250,000 to 999,999 population.

(I) Six monitoring periods per year, dual sample sets must be taken every 60 days. 24 dual samples sets must be collected per monitoring period.

(II) Eight dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) Six dual sample sets must be taken at the high HAA5 locations in the distribution system.

(IV) Six dual sample sets must be taken at an average residence time of the disinfected water in the distribution system.

(V) Four dual sample sets must be taken near the entry point of the disinfected water into the distribution system.

(I) Surface water systems serving between 1,000,000 to

4,999,999 population.

(I) Six monitoring periods per year, dual sample sets must be taken every 60 days. 32 dual samples sets must be collected per monitoring period.

(II) Ten dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) Eight dual sample sets must be taken at the high HAA5 locations in the distribution system.

(IV) Eight dual sample sets must be taken at an average residence time of the disinfected water in the distribution system.

(V) Six dual sample sets must be taken near the entry point of the disinfected water into the distribution system.

(J) Surface water systems serving 5,000,000 or more population.

(I) Six monitoring periods per year, dual sample sets must be taken every 60 days. 40 dual samples sets must be collected per monitoring period.

(II) Twelve dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) Ten dual sample sets must be taken at the high HAA5 locations in the distribution system.

(IV) Ten dual sample sets must be taken at an average residence time of the disinfected water in the distribution system.

(V) Eight dual sample sets must be taken near the entry point of the disinfected water into the distribution system.

(K) Ground water systems serving less than 500 population which are consecutive systems.

(I) One monitoring period per year, dual sample sets must be taken during the peak historical month. Two dual samples sets must be collected per monitoring period.

(II) One dual sample set must be taken at the high TTHM location in the distribution system.

(III) One dual sample set must be taken near the entry point of the disinfected water into the distribution system.

(L) Ground water systems serving less than 500 population which are non-consecutive systems.

(I) One monitoring period per year, dual sample sets must be taken during the peak historical month. Two dual samples sets must be collected per monitoring period.

(II) One dual sample set must be taken at the high TTHM location in the distribution system.

(III) One dual sample set must be taken at the high HAA5 location in the distribution system.

(M) Ground water systems serving between 500 to 9,999 population.

(I) Four monitoring periods per year, dual sample sets must be taken every 90 days. Two dual samples sets must be collected per monitoring period.

(II) One dual sample set must be taken at the high TTHM location in the distribution system.

(III) One dual sample set must be taken at the high HAA5 location in the distribution system.

(N) Ground water systems serving between 10,000 to 99,999 population.

(I) Four monitoring periods per year, dual sample sets must be taken every 90 days. Six dual samples sets must be collected per monitoring period.

(II) Two dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) Two dual sample sets must be taken at the high HAA5 locations in the distribution system.

(IV) One dual sample set must be taken at an average residence time of the disinfected water in the distribution system.

(V) One dual sample set must be taken near the entry point of the disinfected water into the distribution system.

(O) Ground water systems serving between 100,000 to

499,999 population.

(I) Four monitoring periods per year, dual sample sets must be taken every 90 days. Eight dual samples sets must be collected per monitoring period.

(II) Three dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) Three dual sample sets must be taken at the high HAA5 locations in the distribution system.

(IV) One dual sample set must be taken at an average residence time of the disinfected water in the distribution system.

(V) One dual sample set must be taken near the entry point of the disinfected water into the distribution system.

(P) Ground water systems serving 500,000 or greater population.

(I) Four monitoring periods per year, dual sample sets must be taken every 90 days. Twelve dual samples sets must be collected per monitoring period.

(II) Four dual sample sets must be taken at the high TTHM locations in the distribution system.

(III) Four dual sample sets must be taken at the high HAA5 locations in the distribution system.

(IV) Two dual sample sets must be taken at an average residence time of the disinfected water in the distribution system.

(V) Two dual sample sets must be taken near the entry point of the disinfected water into the distribution system.

(Q) A dual sample set (i.e., a TTHM and an HAA5 sample) must be taken at each monitoring location during each monitoring period.

(R) The peak historical month is the month with the highest TTHM or HAA5 levels or the warmest water temperature.

(ii) The water system must take samples at locations other than the existing R309-210-8 monitoring locations. Monitoring locations must be distributed throughout the distribution system.

(iii) If the number of entry points to the distribution system is fewer than the specified number of entry point monitoring locations, excess entry point samples must be replaced equally at high TTHM and HAA5 locations. If there is an odd extra location number, the water system must take a sample at a high TTHM location. If the number of entry points to the distribution system is more than the specified number of entry point monitoring locations, the water system must take samples at entry points to the distribution system having the highest annual water flows.

(iv) The system monitoring under this paragraph (b) may not be reduced under the provisions of R309-105-5(2).

(c) IDSE report. The IDSE report must include the elements required in paragraphs (c)(i) through (c)(iv) of this section. The water system must submit the IDSE report to the Director according to the schedule in R309-210-9(1)(c).

(i) The IDSE report must include all TTHM and HAA5 analytical results from R309-210-8 compliance monitoring and all standard monitoring conducted during the period of the IDSE as individual analytical results and LRAAs presented in a tabular or spreadsheet format acceptable to the Director. If changed from the standard monitoring plan submitted under paragraph (a) of this section, the report must also include a schematic of the distribution system, the population served, and system type (surface water or ground water).

(ii) The IDSE report must include an explanation of any deviations from the approved standard monitoring plan.

(iii) The water system must recommend and justify R309-210-10 compliance monitoring locations and timing based on the protocol in R309-210-9(6).

(iv) The water system must retain a complete copy of

the IDSE report submitted under this section for 10 years after the date that the water system submitted the report. If the Director modifies the R309-210-10 monitoring requirements that the water system recommended in the IDSE report or if the Director approves alternative monitoring locations, the water system must keep a copy of the Director's notification on file for 10 years after the date of the Director's notification. The water system must make the IDSE report and any Director notification available for review by the Director or the public.

(3) System specific studies.

(a) System specific study plan. The water system specific study plan must be based on either existing monitoring results as required under paragraph (a)(i) of this section or modeling as required under paragraph (a)(ii) of this section. The water system must prepare and submit the system specific study plan to the Director according to the schedule in R309-210-9(1)(c).

(i) Existing monitoring results. The water system may comply by submitting monitoring results collected before the water system is required to begin monitoring under R309-210-9(1)(c). The monitoring results and analysis must meet the criteria in paragraphs (a)(i)(A) and (a)(i)(B) of this section.

(A) Minimum requirements.

(I) TTHM and HAA5 results must be based on samples collected and analyzed in accordance with R309-200-4(3). Samples must be collected no earlier than five years prior to the study plan submission date.

(II) The monitoring locations and frequency must meet the conditions identified in this paragraph (a)(i)(A)(II). Each location must be sampled once during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature for every 12 months of data submitted for that location. Monitoring results must include all R309-210-8 compliance monitoring results plus additional monitoring results as necessary to meet minimum sample requirements.

(III) Surface water systems serving a population less than 500 shall have data from:

- (aa) three monitoring locations; and
- (bb) three samples for each TTHM and HAA5.

(IV) Surface water systems serving a population between 500 to 3,300 shall have data from:

- (aa) three monitoring locations; and
- (bb) nine samples each for TTHM and HAA5.

(V) Surface water systems serving a population between 3,301 to 9,999 shall have data from:

- (aa) six monitoring locations; and
- (bb) 36 samples each for TTHM and HAA5.

(VI) Surface water systems serving a population between 10,000 to 49,999 shall have data from:

- (aa) 12 monitoring locations; and
- (bb) 72 samples each for TTHM and HAA5.

(VII) Surface water systems serving a population between 50,000 to 249,999 shall have data from:

- (aa) 24 monitoring locations; and
- (bb) 144 samples each for TTHM and HAA5.

(VIII) Surface water systems serving a population between 250,000 to 999,999 shall have data from:

- (aa) 36 monitoring locations; and
- (bb) 216 samples each for TTHM and HAA5.

(IX) Surface water systems serving a population between 1,000,000 to 4,999,999 shall have data from:

- (aa) 48 monitoring locations; and
- (bb) 288 samples each for TTHM and HAA5.

(X) Surface water systems serving a population 5,000,000 or greater shall have data from:

- (aa) 60 monitoring locations; and

(bb) 360 samples each for TTHM and HAA5.

(XI) Ground water systems serving a population less than 500 shall have data from:

- (aa) three monitoring locations; and
- (bb) three samples for each TTHM and HAA5.

(XII) Ground water systems serving a population between 500 to 9,999 shall have data from:

- (aa) three monitoring locations; and
- (bb) nine samples each for TTHM and HAA5.

(XIII) Ground water systems serving a population between 10,000 to 99,999 shall have data from:

- (aa) 12 monitoring locations; and
- (bb) 48 samples each for TTHM and HAA5.

(XIV) Ground water systems serving a population between 100,000 to 499,999 shall have data from:

- (aa) 18 monitoring locations; and
- (bb) 72 samples each for TTHM and HAA5.

(XV) Ground water systems serving a population of 500,000 or greater shall have data from:

- (aa) 24 monitoring locations; and
- (bb) 96 samples each for TTHM and HAA5.

(B) Reporting monitoring results. The water system must report the information in this paragraph (a)(i)(B).

(I) The water system must report previously collected monitoring results and certify that the reported monitoring results include all compliance and non-compliance results generated during the time period beginning with the first reported result and ending with the most recent R309-210-8 results.

(II) The water system must certify that the samples were representative of the entire distribution system and that treatment, and distribution system have not changed significantly since the samples were collected.

(III) The study monitoring plan must include a schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating the locations and dates of all completed or planned system specific study monitoring.

(IV) The water system specific study plan must specify the population served and system type (surface water or ground water).

(V) The water system must retain a complete copy of the system specific study plan submitted under this paragraph (a)(i), including any Director modification of the system specific study plan, for as long as the water system is required to retain the IDSE report under paragraph (b)(v) of this section.

(VI) If the water system submits previously collected data that fully meet the number of samples required under paragraph (a)(i)(A)(II) of this section and the Director rejects some of the data, the water system must either conduct additional monitoring to replace rejected data on a schedule the Director approves or conduct standard monitoring under R309-210-9(2).

(ii) Modeling. The water system may comply through analysis of an extended period simulation hydraulic model. The extended period simulation hydraulic model and analysis must meet the criteria in this paragraph (a)(ii).

(A) Minimum requirements.

(I) The model must simulate 24 hour variation in demand and show a consistently repeating 24 hour pattern of residence time.

(II) The model must represent the criteria listed in paragraphs (a)(ii)(A)(II)(aa) through (ii) of this section.

- (aa) 75% of pipe volume;
- (bb) 50% of pipe length;
- (cc) All pressure zones;
- (dd) All 12-inch diameter and larger pipes;
- (ee) All 8-inch and larger pipes that connect pressure

zones, influence zones from different sources, storage facilities, major demand areas, pumps, and control valves, or are known or expected to be significant conveyors of water;

(ff) All 6-inch and larger pipes that connect remote areas of a distribution system to the main portion of the system;

(gg) All storage facilities with standard operations represented in the model; and

(hh) All active pump stations with controls represented in the model; and

(ii) All active control valves.

(III) The model must be calibrated, or have calibration plans, for the current configuration of the distribution system during the period of high TTHM formation potential. All storage facilities must be evaluated as part of the calibration process. All required calibration must be completed no later than 12 months after plan submission.

(B) Reporting modeling. The system specific study plan must include the information in this paragraph (a)(ii)(B).

(I) Tabular or spreadsheet data demonstrating that the model meets requirements in paragraph (a)(ii)(A)(II) of this section.

(II) A description of all calibration activities undertaken, and if calibration is complete, a graph of predicted tank levels versus measured tank levels for the storage facility with the highest residence time in each pressure zone, and a time series graph of the residence time at the longest residence time storage facility in the distribution system showing the predictions for the entire simulation period (i.e., from time zero until the time it takes to for the model to reach a consistently repeating pattern of residence time).

(III) Model output showing preliminary 24 hour average residence time predictions throughout the distribution system.

(IV) Timing and number of samples representative of the distribution system planned for at least one monitoring period of TTHM and HAA5 dual sample monitoring at a number of locations no less than would be required for the system under standard monitoring in R309-210-9(2) during the historical month of high TTHM. These samples must be taken at locations other than existing R309-210-8 compliance monitoring locations.

(V) Description of how all requirements will be completed no later than 12 months after the water system submits the system specific study plan.

(VI) Schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating the locations and dates of all completed system specific study monitoring (if calibration is complete) and all R309-210-8 compliance monitoring.

(VII) Population served and system type (surface water or ground water).

(VIII) The water system must retain a complete copy of the system specific study plan submitted under this paragraph (a)(ii), including any Director modification of the system specific study plan, for as long as the water system is required to retain the IDSE report under paragraph (b)(vii) of this section.

(C) If the water system submits a model that does not fully meet the requirements under paragraph (a)(ii) of this section, the water system must correct the deficiencies and respond to Director inquiries concerning the model. If the water system fails to correct deficiencies or respond to inquiries to the Director's satisfaction, the water system must conduct standard monitoring under R309-210-9(2).

(b) IDSE report. The IDSE report must include the elements required in paragraphs (b)(i) through (b)(vi) of this section. The water system must submit the IDSE report according to the schedule in R309-210-9(1)(c).

(i) The IDSE report must include all TTHM and HAA5 analytical results from R309-210-8 compliance monitoring

and all system specific study monitoring conducted during the period of the system specific study presented in a tabular or spreadsheet format acceptable to the Director. If changed from the system specific study plan submitted under paragraph (a) of this section, the IDSE report must also include a schematic of the distribution system, the population served, and system type (surface water or ground water).

(ii) If the water system used the modeling provision under paragraph (a)(ii) of this section, the water system must include final information for the elements described in paragraph (a)(ii)(B) of this section, and a 24-hour time series graph of residence time for each R309-210-10 compliance monitoring location selected.

(iii) The water system must recommend and justify R309-210-10 compliance monitoring locations and timing based on the protocol in R309-210-9(6).

(iv) The IDSE report must include an explanation of any deviations from the approved system specific study plan.

(v) The IDSE report must include the basis (analytical and modeling results) and justification the water system used to select the recommended R309-210-10 monitoring locations.

(vi) The water system may submit the IDSE report in lieu of the system specific study plan on the schedule identified in R309-210-9(1) (c) for submission of the system specific study plan if the water system believes that it has the necessary information by the time that the system specific study plan is due. If the water system elects this approach, the IDSE report must also include all information required under paragraph (a) of this section.

(vii) The water system must retain a complete copy of the IDSE report submitted under this section for 10 years after the date the water system submitted the IDSE report. If the Director modifies the R309-210-10 monitoring requirements the water system recommended in the IDSE report or if the Director approves alternative monitoring locations, the water system must keep a copy of the Director's notification on file for 10 years after the date of the Director's notification. The water system must make the IDSE report and any Director notification available for review by the Director or the public.

(4) 40/30 certification.

(a) Eligibility. The water system is eligible for 40/30 certification if it had no TTHM or HAA5 monitoring violations under R309-210-8 of this part and no individual sample exceeded 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 during an eight consecutive calendar quarter period beginning no earlier than the date specified in this paragraph (a).

(i) If the 40/30 certification is due October 1, 2006 then the eligibility for 40/30 certification is based on eight consecutive calendar quarters of R309-210-8 compliance monitoring results beginning no earlier than January 2004.

(ii) If the 40/30 certification is due April 1, 2007 then the eligibility for 40/30 certification is based on eight consecutive calendar quarters of R309-210-8 compliance monitoring results beginning no earlier than January 2004.

(iii) If the 40/30 certification is due October 1, 2007 then the eligibility for 40/30 certification is based on eight consecutive calendar quarters of R309-210-8 compliance monitoring results beginning no earlier than January 2005.

(iv) If the 40/30 certification is due April 1, 2008 then the eligibility for 40/30 certification is based on eight consecutive calendar quarters of R309-210-8 compliance monitoring results beginning no earlier than January 2005.

(v) Unless the water system is on reduced monitoring under R309-210-8 of this part and were not required to monitor during the specified period. If the water system did not monitor during the specified period, the water system

must base its eligibility on compliance samples taken during the 12 months preceding the specified period.

(b) 40/30 certification.

(i) The water system must certify to the Director that every individual compliance sample taken under R309-210-8 of this part during the periods specified in paragraph (a) of this section were less than or equal to 0.040 mg/L for TTHM and less than or equal to 0.030 mg/L for HAA5, and that the water system did not have any TTHM or HAA5 monitoring violations during the period specified in paragraph (a) of this section.

(ii) The Director may require the water system to submit compliance monitoring results, distribution system schematics, and/or recommended R309-210-10 compliance monitoring locations in addition to the certification. If the water system fails to submit the requested information, the Director may require standard monitoring under R309-210-9(2) or a system specific study under R309-210-9(3).

(iii) The Director may still require standard monitoring under R309-210-9(2) or a system specific study under R309-210-9(3) even if the water system meets the criteria in paragraph (a) of this section.

(iv) A water system must retain a complete copy of its certification submitted under this section for 10 years after the date that the water system submitted the certification. The water system must make the certification, all data upon which the certification is based, and any Director notification available for review by the Director or the public.

(5) Very small system waivers.

(a) If the water system serves fewer than 500 people and it has taken TTHM and HAA5 samples under R309-210-8, the water system is not required to comply with this subpart unless the Director notifies the water system that it must conduct standard monitoring under R309-210-9(2) or a system specific study under R309-210-9(3).

(b) If the water system has not taken TTHM and HAA5 samples under R309-210-8 or if the Director notifies the water system that the water system must comply with this subpart, the water system must conduct standard monitoring under R309-210-9(2) or a system specific study under R309-210-9(3).

(6) Stage 2 (R309-210-10) compliance monitoring location recommendations.

(a) The IDSE report must include the recommendations and justification for where and during what month(s) TTHM and HAA5 monitoring for R309-210-10 of this part should be conducted. The water system must base the recommendations on the criteria in paragraphs (b) through (e) of this section.

(b) The water system must select the number of monitoring locations specified in this paragraph (b). The water system will use these recommended locations as R309-210-10 routine compliance monitoring locations, unless Director requires different or additional locations. The water system should distribute locations throughout the distribution system to the extent possible.

(i) Surface water systems serving less than 500.

(A) One monitoring period per year. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set must be taken at the high TTHM location in the distribution system.

(C) One dual sample set must be taken at the high HAA5 location in the distribution system.

(ii) Surface water systems serving between 500 to 3,300.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set must be taken at the high TTHM location in the distribution system.

(C) One dual sample set must be taken at the high

HAA5 location in the distribution system.

(iii) Surface water systems serving between 3,301 to 9,999 population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set must be taken at the high TTHM locations in the distribution system.

(C) One dual sample set must be taken at the high HAA5 location in the distribution system.

(iv) Surface water systems serving between 10,000 to 49,999 population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. Four dual samples sets must be collected per monitoring period.

(B) Two dual sample sets must be taken at the high TTHM locations in the distribution system.

(C) One dual sample set must be taken at the high HAA5 locations in the distribution system.

(D) One dual sample set must be taken at an existing R309-210-8 compliance location.

(v) Surface water systems serving between 50,000 to 249,999 population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. Eight dual samples sets must be collected per monitoring period.

(B) Three dual sample sets must be taken at the high TTHM locations in the distribution system.

(C) Three dual sample sets must be taken at the high HAA5 locations in the distribution system.

(D) Two dual samples sets must be taken at an existing R309-210-8 compliance location.

(vi) Surface water systems serving between 250,000 to 999,999 population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. 12 dual samples sets must be collected per monitoring period.

(B) Five dual sample sets must be taken at the high TTHM locations in the distribution system.

(C) Four dual sample sets must be taken at the high HAA5 locations in the distribution system.

(D) Three dual sample sets must be taken at an existing R309-210-8 compliance location.

(vii) Surface water systems serving between 1,000,000 to 4,999,999 population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. 16 dual samples sets must be collected per monitoring period.

(B) Six dual sample sets must be taken at the high TTHM locations in the distribution system.

(C) Six dual sample sets must be taken at the high HAA5 locations in the distribution system.

(D) Four dual sample sets must be taken at an existing R309-210-8 compliance location.

(viii) Surface water systems serving 5,000,000 or more population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. 20 dual samples sets must be collected per monitoring period.

(B) Eight dual sample sets must be taken at the high TTHM locations in the distribution system.

(C) Seven dual sample sets must be taken at the high HAA5 locations in the distribution system.

(D) Five dual sample sets must be taken at an existing R309-210-8 compliance location.

(ix) Ground water systems serving less than 500.

(A) One monitoring period per year. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set must be taken at the high

TTHM location in the distribution system.

(C) One dual sample set must be taken at the high HAA5 location in the distribution system.

(x) Ground water systems serving between 500 to 9,999 population.

(A) One monitoring period per year. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set must be taken at the high TTHM location in the distribution system.

(C) One dual sample set must be taken at the high HAA5 location in the distribution system.

(xi) Ground water systems serving between 10,000 to 99,999 population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. Four dual samples sets must be collected per monitoring period.

(B) Two dual sample sets must be taken at the high TTHM locations in the distribution system.

(C) One dual sample set must be taken at the high HAA5 locations in the distribution system.

(D) One dual sample set must be taken at an existing R309-210-8 compliance location.

(xii) Ground water systems serving between 100,000 to 499,999 population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. Six dual samples sets must be collected per monitoring period.

(B) Three dual sample sets must be taken at the high TTHM locations in the distribution system.

(C) Two dual sample sets must be taken at the high HAA5 locations in the distribution system.

(D) One dual sample set must be taken at an existing R309-210-8 compliance location.

(xiii) Ground water systems serving 500,000 or greater population.

(A) Four monitoring periods per year, dual sample sets must be taken every 90 days. Eight dual samples sets must be collected per monitoring period.

(B) Three dual sample sets must be taken at the high TTHM locations in the distribution system.

(C) Three dual sample sets must be taken at the high HAA5 locations in the distribution system.

(D) Two dual sample sets must be taken at an existing R309-210-8 compliance location.

(xiv) All systems must monitor during month of highest DBP concentrations.

(xv) Systems on quarterly monitoring must take dual sample sets every 90 days at each monitoring location, except for subpart H systems serving 500-3,300. Systems on annual monitoring and subpart H systems serving 500-3,300 are required to take individual TTHM and HAA5 samples (instead of a dual sample set) at the locations with the highest TTHM and HAA5 concentrations, respectively. Only one location with a dual sample set per monitoring period is needed if highest TTHM and HAA5 concentrations occur at the same location, and month, if monitored annually).

(c) The water system must recommend R309-210-10 compliance monitoring locations based on standard monitoring results, system specific study results, and R309-210-8 compliance monitoring results. The water system must follow the protocol in paragraphs (c)(i) through (c)(viii) of this section. If required to monitor at more than eight locations, the water system must repeat the protocol as necessary. If the water system do not have existing R309-210-8 compliance monitoring results or if the water system do not have enough existing R309-210-8 compliance monitoring results, the water system must repeat the protocol, skipping the provisions of paragraphs (c)(iii) and (c)(vii) of this section as necessary, until the water system have identified the

required total number of monitoring locations.

(i) Location with the highest TTHM LRAA not previously selected as a R309-210-10 monitoring location.

(ii) Location with the highest HAA5 LRAA not previously selected as a R309-210-10 monitoring location.

(iii) Existing R309-210-8 average residence time compliance monitoring location (maximum residence time compliance monitoring location for ground water systems) with the highest HAA5 LRAA not previously selected as a R309-210-10 monitoring location.

(iv) Location with the highest TTHM LRAA not previously selected as a R309-210-10 monitoring location.

(v) Location with the highest TTHM LRAA not previously selected as a R309-210-10 monitoring location.

(vi) Location with the highest HAA5 LRAA not previously selected as a R309-210-10 monitoring location.

(vii) Existing R309-210-8 average residence time compliance monitoring location (maximum residence time compliance monitoring location for ground water systems) with the highest TTHM LRAA not previously selected as a R309-210-10 monitoring location.

(viii) Location with the highest HAA5 LRAA not previously selected as a R309-210-10 monitoring location.

(d) The water system may recommend locations other than those specified in paragraph (c) of this section if the water system include a rationale for selecting other locations. If the Director approves the alternate locations, the water system must monitor at these locations to determine compliance under R309-210-10 of this part.

(e) The recommended schedule must include R309-210-10 monitoring during the peak historical month for TTHM and HAA5 concentration, unless the Director approves another month. Once the water system have identified the peak historical month, and if the water system is required to conduct routine monitoring at least quarterly, the water system must schedule R309-210-10 compliance monitoring at a regular frequency of every 90 days or fewer.

R309-210-10. Disinfection Byproducts - Stage 2 Requirements.

(1) General requirements.

(a) General. The regulations in this sub-section establish monitoring and other requirements for achieving compliance with maximum contaminant levels based on locational running annual averages (LRAA) for total trihalomethanes (TTHM) and haloacetic acids (five)(HAA5), and for achieving compliance with maximum residual disinfectant residuals for chlorine and chloramine for certain consecutive systems.

(b) Applicability. The water system is subject to these requirements if the system is a community water system or a non-transient non-community water system that uses a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

(c) Schedule. The water system must comply with the requirements in this subpart on the schedule in the following sub-paragraphs (c)(i) through (vi) based on the system type.

(i) For water systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system.

(A) For water systems that serve a population greater than or equal to 100,000 the water system must comply with R309-210-10 monitoring by April 1, 2012.

(B) For water systems that serve a population from 50,000 to 99,999 the water system must comply with R309-210-10 monitoring by October 1, 2012.

(C) For water systems that serve a population from 10,000 to 49,999 the water system must comply with R309-

210-10 monitoring by October 1, 2013.

(D) For water systems that serve a population less than 10,000 the water system must comply with R309-210-10 monitoring by October 1, 2013 if no *Cryptosporidium* monitoring is required under R309-215-15(2)(a)(iv) or October 1, 2014 if *Cryptosporidium* monitoring is required under R309-215-15(a)(iv) or (a)(vi).

(ii) For other water systems that are part of a combined distribution system:

(A) For wholesale systems or consecutive systems the water system must comply with R309-210-10 monitoring at the same time as the system with the earliest compliance date in the combined distribution system.

(iii) The Director may grant up to an additional 24 months for compliance with MCLs and operational evaluation levels if the water system requires capital improvements to comply with an MCL.

(iv) The monitoring frequency is specified in R309-210-10(2)(a)(ii).

(A) If the water system is required to conduct quarterly monitoring, the water system must begin monitoring in the first full calendar quarter that includes the compliance date in paragraph (c).

(B) If the water system is required to conduct monitoring at a frequency that is less than quarterly, the water system must begin monitoring in the calendar month recommended in the IDSE report prepared under R309-210-9(2) or R309-210-9(3) or the calendar month identified in the R309-210-10 monitoring plan developed under R309-210-10(3) no later than 12 months after the compliance date in R309-210-10(1)(c).

(v) If the water system is required to conduct quarterly monitoring, the water system must make compliance calculations at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter (or earlier if the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters). If the water system is required to conduct monitoring at a frequency that is less than quarterly, the water system must make compliance calculations beginning with the first compliance sample taken after the compliance date.

(vi) For the purpose of the schedule in this paragraph (c), the Director may determine that the combined distribution system does not include certain consecutive systems based on factors such as receiving water from a wholesale system only on an emergency basis or receiving only a small percentage and small volume of water from a wholesale system. The Director may also determine that the combined distribution system does not include certain wholesale systems based on factors such as delivering water to a consecutive system only on an emergency basis or delivering only a small percentage and small volume of water to a consecutive system.

(d) Monitoring and compliance.

(i) Systems required to monitor quarterly. To comply with R309-210-10 MCLs in R309-200-5(3)(c)(3)(vi), the water system must calculate LRAAs for TTHM and HAA5 using monitoring results collected under this sub-section and determine that each LRAA does not exceed the MCL. If the water system fails to complete four consecutive quarters of monitoring, the water system must calculate compliance with the MCL based on the average of the available data from the most recent four quarters. If the water system takes more than one sample per quarter at a monitoring location, the water system must average all samples taken in the quarter at that location to determine a quarterly average to be used in the LRAA calculation.

(ii) Systems required to monitor yearly or less frequently. To determine compliance with R309-210-10

MCLs in R309-200-5(3)(c)(3)(vi), the water system must determine that each sample taken is less than the MCL. If any sample exceeds the MCL, the water system must comply with the requirements of R309-210-10(6). If no sample exceeds the MCL, the sample result for each monitoring location is considered the LRAA for that monitoring location.

(e) Violation. The water system is in violation of the monitoring requirements for each quarter that a monitoring result would be used in calculating an LRAA if the water system fail to monitor.

(2) Routine monitoring.

(a) Monitoring.

(i) If the water system submitted an IDSE report, the water system must begin monitoring at the locations and months the water system have recommended in the IDSE report submitted under R309-210-9(6) following the schedule in R309-210-10(1)(c), unless the Director requires other locations or additional locations after its review. If the water system submitted a 40/30 certification under R309-210-9(4) or the water system qualified for a very small system waiver under R309-210-9(5) or the water system is a non-transient non-community water system serving less than 10,000, the water system must monitor at the location(s) and dates identified in the monitoring plan in R309-210-8(5), updated as required by R309-210-10(3).

(ii) The water system must monitor at no fewer than the number of locations identified in this paragraph (a)(ii).

(A) Surface water systems serving less than 500 shall have one monitoring period per year and shall collect two dual samples sets per monitoring period.

(B) Surface water systems serving between 500 to 3,300 shall have four monitoring periods per year and shall collect two dual samples sets per monitoring period.

(C) Surface water systems serving between 3,301 to 9,999 population shall have four monitoring periods per year and shall collect two dual samples sets per monitoring period.

(D) Surface water systems serving between 10,000 to 49,999 population shall have four monitoring periods per year and shall collect four dual samples sets per monitoring period.

(E) Surface water systems serving between 50,000 to 249,999 population shall have four monitoring periods per year and shall collect eight dual samples sets per monitoring period.

(F) Surface water systems serving between 250,000 to 999,999 population shall have four monitoring periods per year and shall collect 12 dual samples per monitoring period.

(G) Surface water systems serving between 1,000,000 to 4,999,999 population shall have four monitoring periods per year and shall collect 16 dual samples sets per monitoring period.

(H) Surface water systems serving 5,000,000 or more population shall have four monitoring periods per year and shall collect 20 dual samples sets per monitoring period.

(I) Ground water systems serving less than 500 shall have one monitoring period per year and shall collect two dual samples sets per monitoring period.

(J) Ground water systems serving between 500 to 9,999 population shall have one monitoring period per year and shall collect two dual samples sets per monitoring period.

(K) Ground water systems serving between 10,000 to 99,999 population shall have four monitoring periods per year and shall collect four dual samples sets per monitoring period.

(L) Ground water systems serving between 100,000 to 499,999 population shall have four monitoring periods per year and shall collect six dual samples sets per monitoring period.

(M) Ground water systems serving 500,000 or greater population shall have four monitoring periods per year and shall collect eight dual samples sets per monitoring period.

(N) All systems must monitor during month of highest DBP concentrations.

(O) Systems on quarterly monitoring must take dual sample sets every 90 days at each monitoring location, except for surface water systems serving 500-3,300. Systems on annual monitoring and surface water systems serving 500-3,300 are required to take individual TTHM and HAA5 samples (instead of a dual sample set) at the locations with the highest TTHM and HAA5 concentrations, respectively. Only one location with a dual sample set per monitoring period is needed if highest TTHM and HAA5 concentrations occur at the same location (and month, if monitored annually).

(iii) If the water system is an undisinfected system that begins using a disinfectant other than UV light after the dates in R309-210-9 for complying with the Initial Distribution System Evaluation requirements, the water system must consult with the Director to identify compliance monitoring locations for this sub-section. The water system must then develop a monitoring plan under R309-210-10(3) that includes those monitoring locations.

(b) Analytical methods. The water system must use an approved method listed in R309-200-4(3) for TTHM and HAA5 analyses in this sub-section. Analyses must be conducted by laboratories that have received certification by EPA or the Director as specified in R309-200-4(3).

(3) Stage 2 monitoring plan.

(a)(i) The water system must develop and implement a monitoring plan to be kept on file for Director and public review. The monitoring plan must contain the elements in paragraphs (a)(i)(A) through (a)(i)(D) of this section and be complete no later than the date the water system conduct the initial monitoring under this sub-section.

(A) Monitoring locations;

(B) Monitoring dates;

(C) Compliance calculation procedures; and

(D) Monitoring plans for any other systems in the combined distribution system if the Director has reduced monitoring requirements under the Director authority in R309-105-5(2).

(ii) If the water system were not required to submit an IDSE report under either R309-210-9(2) or R309-210-9(3), and the water system do not have sufficient R309-210-8 monitoring locations to identify the required number of R309-210-10 compliance monitoring locations indicated in R309-210-9(6)(b), the water system must identify additional locations by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of compliance monitoring locations have been identified. The water system must also provide the rationale for identifying the locations as having high levels of TTHM or HAA5. If the water system have more R309-210-8 monitoring locations than required for R309-210-10 compliance monitoring in R309-210-9(6)(b), the water system must identify which locations the water system will use for R309-210-10 compliance monitoring by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of R309-210-10 compliance monitoring locations have been identified.

(b) If the water system is a surface water system serving greater than 3,300 people, the water system must submit a copy of the monitoring plan to the Director prior to the date the water system conduct the initial monitoring under this sub-section, unless the IDSE report submitted under R309-210-9 contains all the information required by this section.

(c) The water system may revise the monitoring plan to reflect changes in treatment, distribution system operations and layout (including new service areas), or other factors that may affect TTHM or HAA5 formation, or for Director-approved reasons, after consultation with the Director

regarding the need for changes and the appropriateness of changes. If the water system changes monitoring locations, the water system must replace existing compliance monitoring locations with the lowest LRAA with new locations that reflect the current distribution system locations with expected high TTHM or HAA5 levels. The Director may also require modifications in the monitoring plan. If the water system is a surface water system serving greater than 3,300 people, the water system must submit a copy of the modified monitoring plan to the Director prior to the date the water system is required to comply with the revised monitoring plan.

(4) Reduced monitoring.

(a) The water system may reduce monitoring to the level specified in this paragraph (a) any time the LRAA is equal to or less than 0.040 mg/L for TTHM and equal to or less than 0.030 mg/L for HAA5 at all monitoring locations. The water system may only use data collected under the provisions of this sub-section or R309-210-8 to qualify for reduced monitoring. In addition, the source water annual average TOC level, before any treatment, must be less than or equal to 4.0 mg/L at each treatment plant treating surface water or ground water under the direct influence of surface water, based on monitoring conducted under either R309-210-8(2)(a)(iii) or R309-215-12.

(i) Surface water systems serving a population less than 500. Monitoring reduction

(A) Monitoring may not be reduced.

(ii) Surface water systems serving between 500 to 3,300 population.

(A) One monitoring periods per year. 1 TTHM and 1 HAA5 sample must be collected per monitoring period.

(B) One sample at the location and during the quarter with the highest TTHM single measurement in the distribution system.

(C) One sample at the location and during the quarter with the highest HAA5 single measurement in the distribution system.

(D) Only one dual sample set per year is required if the highest TTHM and HAA5 measurements occurred at the same location and quarter.

(iii) Surface water systems serving between 3,301 to 9,999 population.

(A) One monitoring period per year. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set at the location and during the quarter with the highest TTHM single measurement in the distribution system.

(C) One dual sample set at the location and during the quarter with the highest HAA5 single measurement in the distribution system.

(iv) Surface water systems serving between 10,000 to 49,999 population.

(A) Four monitoring periods per year. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set must be taken at the location of the highest TTHM LRAAs.

(C) One dual sample set must be taken at the location of the highest HAA5 LRAAs.

(v) Surface water systems serving between 50,000 to 249,999 population.

(A) Four monitoring periods per year. Four dual samples sets must be collected per monitoring period.

(B) A dual sample set must be taken at each of the locations of the two highest TTHM LRAAs.

(C) A dual sample set must be taken at each of the locations of the two highest HAA5 LRAAs.

(vi) Surface water systems serving between 250,000 to 999,999 population.

(A) Four monitoring periods per year. Six dual samples

sets must be collected per monitoring period.

(B) A dual sample set must be taken at each of the locations of the three highest TTHM LRAAs.

(C) A dual sample set must be taken at each of the locations of the three highest HAA5 LRAAs.

(vii) Surface water systems serving between 1,000,000 to 4,999,999 population.

(A) Four monitoring periods per year. Eight dual samples sets must be collected per monitoring period.

(B) A dual sample set must be taken at each of the locations of the four highest TTHM LRAAs.

(C) A dual sample set must be taken at each of the locations of the four highest HAA5 LRAAs.

(viii) Surface water systems serving 5,000,000 or more population.

(A) Four monitoring periods per year. 10 dual samples sets must be collected per monitoring period.

(B) A dual sample set must be taken at each of the locations of the five highest TTHM LRAAs.

(C) A dual sample set must be taken at each of the locations of the five highest HAA5 LRAAs.

(ix) Ground water systems serving less than 500.

(A) One monitoring period every three years. 1 TTHM and 1 HAA5 sample must be collected per monitoring period.

(B) One sample at the location and during the quarter with the highest TTHM single measurement in the distribution system.

(C) One sample at the location and during the quarter with the highest HAA5 single measurement in the distribution system.

(D) Only one dual sample set per year is required if the highest TTHM and HAA5 measurements occurred at the same location and quarter.

(x) Ground water systems serving between 500 to 9,999 population.

(A) One monitoring period per year. 1 TTHM and 1 HAA5 sample must be collected per monitoring period.

(B) One sample at the location and during the quarter with the highest TTHM single measurement in the distribution system.

(C) One sample at the location and during the quarter with the highest HAA5 single measurement in the distribution system.

(D) Only one dual sample set per year is required if the highest TTHM and HAA5 measurements occurred at the same location and quarter.

(xi) Ground water systems serving between 10,000 to 99,999 population.

(A) One monitoring period per year. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set at the location and during the quarter with the highest TTHM single measurement in the distribution system.

(C) One dual sample set at the location and during the quarter with the highest HAA5 single measurement in the distribution system.

(xii) Ground water systems serving between 100,000 to 499,999 population.

(A) Four monitoring periods per year. Two dual samples sets must be collected per monitoring period.

(B) One dual sample set must be taken at the location of the highest TTHM LRAAs.

(C) One dual sample set must be taken at the location of the highest HAA5 LRAAs.

(xiii) Ground water systems serving 500,000 or greater population.

(A) Four monitoring periods per year. Four dual samples sets must be collected per monitoring period.

(B) A dual sample set must be taken at each of the

locations of the two highest TTHM LRAAs.

(C) A dual sample set must be taken at each of the locations of the two highest HAA5 LRAAs.

(xiv) Systems on quarterly monitoring must take dual sample sets every 90 days.

(b) The water system may remain on reduced monitoring as long as the TTHM LRAA less than or equal to 0.040 mg/L and the HAA5 LRAA less than or equal to 0.030 mg/L at each monitoring location (for systems with quarterly reduced monitoring) or each TTHM sample less than or equal to 0.060 mg/L and each HAA5 sample less than or equal to 0.045 mg/L (for systems with annual or less frequent monitoring). In addition, the source water annual average TOC level, before any treatment, must be less than or equal to 4.0 mg/L at each treatment plant treating surface water or ground water under the direct influence of surface water, based on monitoring conducted under either R309-210-8(2)(a)(iii) or R309-215-12.

(c) If the LRAA based on quarterly monitoring at any monitoring location exceeds either 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 or if the annual (or less frequent) sample at any location exceeds either 0.060 mg/L for TTHM or 0.045 mg/L for HAA5, or if the source water annual average TOC level, before any treatment, is greater than 4.0 mg/L at any treatment plant treating surface water or ground water under the direct influence of surface water, the water system must resume routine monitoring under R309-210-10(2) or begin increased monitoring if R309-210-10(6) applies.

(d) The Director may return the system to routine monitoring at the Director's discretion.

(5) Additional requirements for consecutive systems.

If the water system is a consecutive system that does not add a disinfectant but delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light, the water system must comply with analytical and monitoring requirements for chlorine and chloramines in R309-200-4(3) and the compliance requirements in R309-210-8(6)(c)(i) beginning April 1, 2009, unless required earlier by the Director, and report monitoring results under R309-105-16(2)(c).

(6) Conditions requiring increased monitoring.

(a) If the water system is required to monitor at a particular location annually or less frequently than annually under R309-210-10(2) or R309-210-10(4), the water system must increase monitoring to dual sample sets once per quarter (taken every 90 days) at all locations if a TTHM sample is greater than 0.080 mg/L or a HAA5 sample is greater than 0.06 mg/L at any location.

(b) The water system is in violation of the MCL when the LRAA exceeds the R309-210-10 MCLs in R309-200-5(3)(c)(vi), calculated based on four consecutive quarters of monitoring (or the LRAA calculated based on fewer than four quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters). The water system is in violation of the monitoring requirements for each quarter that a monitoring result would be used in calculating an LRAA if the water system fail to monitor.

(c) The water system may return to routine monitoring once the water system have conducted increased monitoring for at least four consecutive quarters and the LRAA for every monitoring location is less than or equal to 0.060 mg/L for TTHM and less than or equal to 0.045 mg/L for HAA5.

(7) Operational evaluation levels.

(a) The water system have exceeded the operational evaluation level at any monitoring location where the sum of the two previous quarters' TTHM results plus twice the current quarter's TTHM result, divided by 4 to determine an average, exceeds 0.080 mg/L, or where the sum of the two

previous quarters' HAA5 results plus twice the current quarter's HAA5 result, divided by 4 to determine an average, exceeds 0.060 mg/L.

(b)(i) If the water system exceeds the operational evaluation level, the water system must conduct an operational evaluation and submit a written report of the evaluation to the Director no later than 90 days after being notified of the analytical result that causes the water system to exceed the operational evaluation level. The written report must be made available to the public upon request.

(ii) The operational evaluation must include an examination of system treatment and distribution operational practices, including storage tank operations, excess storage capacity, distribution system flushing, changes in sources or source water quality, and treatment changes or problems that may contribute to TTHM and HAA5 formation and what steps could be considered to minimize future exceedences.

(A) The water system may request and the Director may allow the water system to limit the scope of the evaluation if the water system is able to identify the cause of the operational evaluation level exceedance.

(B) The request to limit the scope of the evaluation does not extend the schedule in paragraph (b)(i) of this section for submitting the written report. The Director must approve this limited scope of evaluation in writing and the water system must keep that approval with the completed report.

(8) Requirements for remaining on reduced TTHM and HAA5 monitoring based on R309-210-8 results.

The water system may remain on reduced monitoring after the dates identified in R309-210-10(1)(c) for compliance with this sub-section only if the water system qualifies for a 40/30 certification under R309-210-9(4) or have received a very small system waiver under R309-210-9(5), plus the water system meets the reduced monitoring criteria in R309-210-10(4)(a), and the water system does not change or add monitoring locations from those used for compliance monitoring under R309-210-8. If the monitoring locations under this sub-section differ from the monitoring locations under R309-210-8, the water system may not remain on reduced monitoring after the dates identified in R309-210-10(1)(c) for compliance with this sub-section.

(9) Requirements for remaining on increased TTHM and HAA5 monitoring based on R309-210-8 results.

If the water system was on increased monitoring under R309-210-8(2)(a), the water system must remain on increased monitoring until the water system qualifies for a return to routine monitoring under R309-210-10(6)(c). The water system must conduct increased monitoring under R309-210-10(6) at the monitoring locations in the monitoring plan developed under R309-210-10(3) beginning at the date identified in R309-210-10(1)(c) for compliance with this sub-section and remain on increased monitoring until the water system qualifies for a return to routine monitoring under R309-210-10(6)(c).

(10) Reporting and recordkeeping requirements.

(a) Reporting.

(i) The water system must report the following information for each monitoring location to the Director within 10 days of the end of any quarter in which monitoring is required:

(A) Number of samples taken during the last quarter.

(B) Date and results of each sample taken during the last quarter.

(C) Arithmetic average of quarterly results for the last four quarters for each monitoring location (LRAA), beginning at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter. If the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the

monitoring results of subsequent quarters, the water system must report this information to the Director as part of the first report due following the compliance date or anytime thereafter that this determination is made. If the water system is required to conduct monitoring at a frequency that is less than quarterly, the water system must make compliance calculations beginning with the first compliance sample taken after the compliance date, unless the water system is required to conduct increased monitoring under R309-210-10(6).

(D) Whether, based on R309-200-5(3)(c)(vi) and this sub-section, the MCL was violated at any monitoring location.

(E) Any operational evaluation levels that were exceeded during the quarter and, if so, the location and date, and the calculated TTHM and HAA5 levels.

(ii) If the system is a surface water system seeking to qualify for or remain on reduced TTHM/HAA5 monitoring, the water system must report the following source water TOC information for each treatment plant that treats surface water or ground water under the direct influence of surface water to the Director within 10 days of the end of any quarter in which monitoring is required:

(A) The number of source water TOC samples taken each month during last quarter.

(B) The date and result of each sample taken during last quarter.

(C) The quarterly average of monthly samples taken during last quarter or the result of the quarterly sample.

(D) The running annual average (RAA) of quarterly averages from the past four quarters.

(E) Whether the RAA exceeded 4.0 mg/L.

(iii) The Director may choose to perform calculations and determine whether the MCL was exceeded or the system is eligible for reduced monitoring in lieu of having the system report that information.

(b) Recordkeeping. The water system must retain any R309-210-10 monitoring plans and the R309-210-10 monitoring results as required by R309-105-17.

KEY: drinking water, distribution system monitoring, compliance determinations

September 24, 2009

Notice of Continuation March 13, 2015

19-4-104

**R309. Environmental Quality, Drinking Water.
R309-215. Monitoring and Water Quality: Treatment
Plant Monitoring Requirements.****R309-215-1. Purpose.**

The purpose of this rule is to outline the monitoring and reporting requirements for public water systems which treat water prior to providing it for human consumption.

R309-215-2 Authority.

R309-215-3 Definitions.

R309-215-4 General.

R309-215-5 Monitoring Requirements for Groundwater Disinfection.

R309-215-6 Monitoring Requirements for Miscellaneous Treatment Plants.

R309-215-7 Surface Water Treatment Plant Evaluations.

R309-215-8 Surface Water Treatment Plant Monitoring and Reporting.

R309-215-9 Turbidity Monitoring and Reporting.

R309-215-10 Residual Disinfectant Monitoring.

R309-215-11 Waterborne Disease Outbreak.

R309-215-12 Monitoring Requirements for Disinfection Byproducts Precursors (DBPP).

R309-215-13 Treatment Techniques for control of Disinfection Byproducts Precursors (DBPP).

R309-215-14 Disinfection Profiling and Benchmarking.

R309-215-15 Enhanced Treatment for Cryptosporidium (Federal Subpart W).

R309-215-16 Groundwater Rule.

R309-215-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-215-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-215-4. General.

(1) All public water systems are required to monitor their water to determine if they comply with the requirements for water quality stated in R309-200. In exceptional circumstances the Director may modify the monitoring requirements given herein as is deemed appropriate.

(2) The Director may determine compliance or initiate compliance actions based upon analytical results and other information compiled by authorized representatives.

(3) If the water fails to meet minimum standards, then certain public notification procedures shall be carried out, as outlined in R309-220. Water suppliers shall also keep analytical records in their possession, for a required length of time, as outlined in R309-105-17.

(4) All samples shall be taken at representative sites as specified herein for each contaminant or group of contaminants.

(5) For the purpose of determining compliance, samples may only be considered if they have been analyzed by the State of Utah primacy laboratory or a laboratory certified by the Utah State Health Laboratory.

(6) Measurements for pH, temperature, turbidity and disinfectant residual may, under the direction of the direct responsible operator, be performed by any water supplier or their representative.

(7) All samples shall be marked either: routine, repeat, check or investigative before submission of such samples to a certified laboratory. Routine, repeat, and check samples shall be considered compliance purpose samples.

(8) All sample results can be sent to the Division of Drinking Water either electronically or in hard copy form.

(9) Unless otherwise required by the Director, the effective dates on which required monitoring shall be initiated are identical to the dates published in 40 CFR 141 on July 1, 2001 by the Office of the Federal Register

(10) Exemptions from monitoring requirements shall only be granted in accordance with R309-105-5.

R309-215-5. Monitoring Requirements for Groundwater Disinfection.

(1) General: Continuous disinfection is recommended for all drinking water sources. Continuous disinfection shall be required of all groundwater sources which do not consistently meet standards of bacteriologic quality. Once required by the Director continuous disinfection shall not be interrupted nor terminated unless so authorized, in writing, by the Director.

(2) Disinfection Reporting: For each disinfection treatment facility, plant management shall report information to the Division as specified in R309-105-16(2)(c).

(3) A water system shall report a malfunction of any facility or equipment such that a detectable residual cannot be maintained throughout the distribution system. The system shall notify the Division as soon as possible, but no later than by the end of the next business day. The system also shall notify the Division by the end of the next business day whether or not the residual was restored to at least 0.2 mg/L within four hours.

R309-215-6. Monitoring Requirements for Miscellaneous Treatment Plants.

(1) Treatment of the drinking water may be required for other than inactivation of microbial contaminants or removal/inactivation of pathogens and viruses. Miscellaneous treatment methods are outlined in R309-535.

(2) The Director may require additional monitoring as necessary to evaluate the treatment process and to ensure the quality of the water. The specific analytes, frequency of monitoring, the reporting frequency and the sampling location for which monitoring may be required shall be determined by the following:

(a) the contaminant of concern for which the treatment process has been installed;

(b) the process control samples required to operate treatment process being used; and

(c) alternative surrogate sampling when it is either quicker or less expensive and still provides the necessary information;

(3) For point-of-use or point-of-entry technology the location of sampling may be at each treatment unit spread out over time.

(4) If monitoring is required, the Director shall provide the report forms and the water system shall report the data as required by R309-105-16(3). Alternate forms may be used as long as prior approval from the Director is obtained.

R309-215-7. Surface Water Treatment Evaluations.

(1) General: Surface water sources or groundwater sources under direct influence of surface water shall be disinfected during the course of required surface water treatment. Disinfection shall not be considered a substitute for inadequate collection facilities. All public water systems which use a treatment technique to treat water obtained in whole or in part from surface water sources or ground water sources under the direct influence of surface water shall monitor the plant's operation and report the results to the Division as indicated in R309-215-7 through R309-215-14. Individual plants will be evaluated in accordance with the

criteria outlined in paragraph (2) below. Based on information submitted and/or plant inspections, the plant will receive credit for treatment techniques other than disinfection that remove pathogens, specifically *Giardia lamblia* and viruses. This credit (log removal) will reduce the required disinfectant "CT" value which the plant shall maintain to assure compliance with R309-200-5(7)(a)(i).

(2) Criteria for Individual Treatment Plant Evaluation: New and existing water treatment plants shall meet specified monitoring and performance criteria in order to ensure that filtration and disinfection are satisfactorily practiced. The monitoring requirements and performance criteria for turbidity and disinfection listed above provide the minimum for the Division to evaluate the plant's efficiency in removing and/or inactivating 99.9 percent (3-log) of *Giardia lamblia* cysts and 99.99 percent (4-log) of viruses as required by R309-505-6(2)(a) and (b).

(3) The Division, upon evaluation of individual raw water sources, surface water or ground water under the direct influence of surface water, may require greater than the 3-log, 4-log removal/inactivation of *Giardia* and viruses respectively. If a raw water source exhibits an estimated concentration of 1 to 10 *Giardia* cysts per 100 liters, 4 and 5-log removal/inactivation may be required. If the raw water exhibits a concentration of 10 to 100 cysts per 100 liters, 5 and 6-log removal/inactivation may be required.

If a plant decides to recycle any spent filter backwash water, thickener supernatant, or liquids from dewatering processes the Division shall be notified in writing by December 8, 2003 or prior to recycling such waters. Such notification shall include, at a minimum:

(a) A plant schematic showing the origin of all flows which are recycled (including, but not limited to, spent filter backwash water, thickener supernatant, and any liquids from dewatering processes), the hydraulic conveyance used to transport them, and the location where they are reintroduced back into the treatment plant.

(b) Typical recycle flow in gallons per minute (gpm), the highest observed plant flow experienced in the previous year (gpm), design flow for the treatment plant (gpm), and operating capacity approved by the Director for the plant where the Director has made such determinations.

(c) Treatment technique (TT) requirement. Any system that recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes shall return these flows through the processes of a system's existing conventional or direct filtration system as defined in R309-525 or R309-530 or at an alternate location approved by the Director by or after June 8, 2004. If capital improvements are required to modify the recycle location to meet this requirement, all capital improvements must be completed no later than June 8, 2006.

(4) The Director, upon individual plant evaluation, may assign the treatment techniques (coagulation, flocculation, sedimentation and filtration) credit toward removal of *Giardia* cysts and viruses. The greater the number of barriers in the treatment process, the greater the reduction of pathogens, therefore lessor credit will be given to processes such as direct filtration which eliminate one or more conventional barriers. Plants may monitor turbidity at multiple points in the treatment process as evidence of the performance of an individual treatment technique.

(5) The nominal credit that will be assigned certain conventional processes are outlined in Table 215-1:

Conventional Complete Treatment	2.5	2.0
Direct Filtration	2.0	1.0
Slow Sand Filtration	2.0	2.0
Diatomaceous Earth Filters	2.0	1.0

(6) Upon evaluation of information provided by individual plants or obtained during inspections by Division staff, the Director may increase or decrease the nominal credit assigned individual plants based on that evaluation.

(a) Items which would augment the treatment process and thereby warrant increased credit are:

(i) facilities or means to moderate extreme fluctuations in raw water characteristics;

(ii) sufficient on-site laboratory facilities regularly used to alert operators to changes in raw water quality;

(iii) use of pilot stream facilities which duplicate treatment conditions but allow operators to know results of adjustments much sooner than if only monitoring plant effluent;

(iv) use of additional monitoring methods such as particle size and distribution analysis to achieve greater efficiency in particulate removal;

(v) regular program for preventive maintenance, records of such, and general good housekeeping; or

(vi) adequate staff of well trained and certified plant operators.

(b) Items which would be considered a detriment to the treatment process and thereby warrant decreased credit are:

(i) inadequate staff of trained and certified operators;

(ii) lack of regular maintenance and poor housekeeping;

or

(iii) insufficient on-site laboratory facilities.

R309-215-8. Surface Water Treatment Plant Monitoring and Reporting.

Treatment plant management shall report the following to the Division within ten days after the end of each month that the system serves water to the public, except as otherwise noted:

- (1) For each day;
 - (a) if the plant treats water from multiple sources, the sources being utilized (including recycled backwash water) and the ratio for each if blending occurs.
 - (b) the total volume of water treated by the plant,
 - (c) the turbidity of the raw water entering the plant,
 - (d) the pH of the effluent water, measured at or near the monitoring point for disinfectant residual,
 - (e) the temperature of the effluent water, measured at or near the monitoring point for disinfectant residual,
 - (f) the type and amount of chemicals used in the treatment process (clearly indicating the weight and active percent of chemical if dry feeders are used, or the percent solution and volume fed if liquid feeders are used),
 - (g) the high and low temperature and weather conditions (local forecast information may be used, but any precipitation in the watershed should be further described as light, moderate, heavy, or extremely heavy), and

(h) the results of any "jar tests" conducted that day

- (2) For each filter, each day;
 - (a) the rate of water applied to each (gpm/sq.ft.),
 - (b) the head loss across each (feet of water or psi),
 - (c) length of backwash (if conducted; in minutes), and
 - (d) hours of operation since last backwashed.

(3) Annually; certify in writing as required by R309-105-14(1) that when a product containing acrylamide and/or epichlorohydrin is used, the combination of the amount of residual monomer in the polymer and the dosage rate does not exceed the levels specified as follows:

- (a) Acrylamide: 0.05%, when dosed at 1 part per

TABLE 215-1
CONVENTIONAL PROCESS CREDIT

Process	Log Reduction Credit <i>Giardia</i>	Viruses
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million, and

(b) Epichlorohydrin: 0.01%, when dosed at 20 parts per million.

Certification may rely on manufacturers data.

(4) Additional record-keeping for plants that recycle.

The system must collect and retain on file recycle flow information for review and evaluation by the Director beginning June 8, 2004 or upon approval for recycling. As a minimum the following shall be maintained:

(a) Copy of the recycle notification and information submitted to the Division under R309-215-7(3).

(b) List of all recycle flows and the frequency with which they are returned.

(c) Average and maximum backwash flow rates through the filters and the average and maximum duration of the filter backwash process in minutes.

(d) Typical filter run length and a written summary of how filter run length is determined.

(e) The type of treatment provided for the recycle flow.

(f) Data on the physical dimensions of the equalization and/or treatment units, typical and maximum hydraulic loading rates, type of treatment chemicals used, average dose, frequency of use and frequency at which solids are removed, if applicable.

R309-215-9. Turbidity Monitoring and Reporting.

Public water systems utilizing surface water and ground water under the direct influence of surface water shall monitor for turbidity in accordance with this section. Small surface water systems serving a population less than 10,000 shall monitor in accordance with subsections (1), (2), (3), (5) and (6). Large surface water systems serving 10,000 or more population shall monitor in accordance with subsections (1), (2), (3), (4) and (6).

(1) Routine Monitoring Requirements for Treatment Facilities utilizing surface water sources or ground water sources under the direct influence of surface water.

(a) All public water systems which use a treatment technique to treat water obtained in whole or in part from surface water sources or ground water sources under the direct influence of surface water shall monitor for turbidity at the treatment plant's clearwell outlet. This monitoring shall be independent of the individual filter monitoring required by R309-525-15(4)(b)(vi) and R309-525-15(4)(c)(vii). Where the plant facility does not have an internal clearwell, the turbidity shall be monitored at the inlet to a finished water reservoir external to the plant provided such reservoir receives only water from the treatment plant and, furthermore, is located before any point of consumer connection to the water system. If such external reservoir does not exist, turbidity shall then be monitored at a location immediately downstream of the treatment plant filters.

(b) All treatment plants, with the exception of those utilizing slow sand filtration and other conditions indicated in section (c) below, shall be equipped with continuous turbidity monitoring and recording equipment for which the direct responsible charge operator will validate the continuous measurements for accuracy in accordance with paragraph (d) below. These plants shall continuously record the finished water turbidity of the combined filter effluent as well as each individual filter. All systems shall be equipped to continuously monitor the turbidity at each filter unless the treatment plant is only equipped with two filters and the turbidity is measured at the combined filter effluent (CFE). If there is a failure in continuous monitoring equipment the system shall conduct grab sampling every 4 hours in lieu of continuous monitoring, but for no more than five working days following the failure of equipment. Systems serving less than 10,000 population shall have no more than 14 days to

conduct grab samples in lieu of continuous monitoring in order to correct any failing equipment. All surface water systems shall monitor the turbidity results of individual filters at a frequency no greater than every 15 minutes.

(c) Turbidity measurements, as outlined below, shall be reported to the Division within ten days after the end of each month that the system serves water to the public. Systems are required to mark and interpret turbidity values from the recorded charts at the end of each four-hour interval of operation (or some shorter regular time interval) to determine compliance with the turbidity performance criterion. For systems using slow sand filtration the Director may reduce the sampling frequency to as little as once per day if the Director determines that less frequent monitoring is sufficient to indicate effective filtration performance. For systems serving 500 or fewer persons, the Director may reduce the turbidity sampling frequency to as little as once per day, regardless of the type of filtration treatment used, if the Director determines that less frequent monitoring is sufficient to indicate effective filtration performance.

The following shall be reported and the required percentage achieved for compliance:

(i) The total number of interpreted filtered water turbidity measurements taken during the month;

(ii) The number and percentage of interpreted filtered water turbidity measurements taken during the month which are less than or equal to the turbidity limits specified in R309-200-5(5)(a)(ii) (or increased limit approved by the Director). The percentage of measurements which are less than or equal to the turbidity limit shall be 95 percent or greater for compliance; and

(iii) The date and value of any turbidity measurements taken during the month which exceed 5 NTU. The system shall inform the Division as soon as practical, but no later than 24 hours after the exceedance is known, in accordance with R309-220-6(2)(c) if any turbidity measurements exceed 5 NTU.

(d) The analytical method which shall be followed in making the required determinations shall be Nephelometric Method - Nephelometric Turbidity Unit as set forth in the latest edition of Standard Methods for Examination of Water and Wastewater, 1985, American Public Health Association et al., (Method 214A, pp. 134-136 in the 16th edition). Continuous turbidity monitoring equipment shall be checked for accuracy and recalibrated using methods outlined in the above standard at a minimum frequency of monthly. The direct responsible charge operator will note on the turbidity report form when these recalibrations are conducted. For systems that practice lime softening, the representative combined filter effluent turbidity sample may be acidified prior to analysis with prior approval by the Director as to the protocol.

(2) Procedures if a Filtered Water Turbidity Limit is Exceeded

(a) Resampling -

If an analysis indicates that the turbidity limit has been exceeded, the sampling and measurement shall be confirmed by resampling as soon as practicable and preferably within one hour.

(b) If the result of resampling confirms that the turbidity limit has been exceeded, the system shall collect and have analyzed at least one bacteriologic sample near the first service connection from the source as specified in R309-210-5(1)(f). The system shall collect this bacteriologic sample within 24 hours of the turbidity exceedance. Sample results from this monitoring shall be included in determining bacteriologic compliance for that month.

(c) Initial Notification of the Director -

If the repeat sample confirms that the turbidity limit has

been exceeded, the supplier shall report this fact to the Director as soon as practical, but no later than 24 hours after the exceedance is known in accordance with the public notification requirements under R309-220-6(2)(c). This reporting is in addition to reporting the incident on any monthly reports.

(3) For the purpose of individual plant evaluation and establishment of pathogen removal credit for the purpose of lowering the required "CT" value assigned a plant, plant management may do additional turbidity monitoring at other points to satisfy criteria in R309-215-7(2).

(4) Additional reporting and recordkeeping requirements for large surface water systems (serving greater than 10,000 population) reporting and recordkeeping requirements.

In addition to the reporting and recordkeeping requirements sub-sections (1), (2) and (3) above, a large surface water system that provides conventional filtration treatment or direct filtration shall report monthly to the Division the information specified in paragraphs (a) and (b) of this section. In addition to the reporting and recordkeeping requirements above, a public water system subject to the requirements of this subpart that provides filtration approved under R309-530-8 or R309-530-9 shall report monthly to the Division the information specified in paragraphs (a) of this section. The reporting in paragraph (a) of this section is in lieu of the reporting specified above.

(a) Turbidity measurements, as required in R309-200-5(5)(a), shall be reported within 10 days after the end of each month the system serves water to the public. Information that shall be reported includes:

(i) The total number of filtered water turbidity measurements taken during the month.

(ii) The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to 0.3 NTU or those levels established under R309-200-5(5)(a)(ii).

(iii) The date and value of any turbidity measurements taken during the month which exceed 1 NTU for systems using conventional filtration treatment or direct filtration, or which exceed the maximum level set by the Director under R309-530-8 or R309-530-9.

(b) Systems shall maintain the results of individual filter monitoring taken under R309-215-9(1)(b) for at least three years. Systems shall record the results of individual filter monitoring every 15 minutes. Systems shall report that they have conducted individual filter turbidity monitoring within 10 days after the end of each month the system serves water to the public. Systems shall report individual filter turbidity measurement results within 10 days after the end of each month the system serves water to the public only if measurements demonstrate one or more of the conditions in paragraphs (b)(i) through (iv) of this section. Systems that use lime softening may apply to the Director for alternative exceedance levels for the levels specified in paragraphs (b)(i) through (iv) of this section if they can demonstrate that higher turbidity levels in individual filters are due to lime carryover only and not due to degraded filter performance.

(i) For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart, the system shall report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system shall either produce a filter profile for the filter within 7 days of the exceedance (if the system is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.

(ii) For any individual filter that has a measured

turbidity level of greater than 0.5 NTU in two consecutive measurements taken 15 minutes apart at the end of the first four hours of continuous filter operation after the filter has been backwashed or otherwise taken offline, the system shall report the filter number, the turbidity, and the date(s) on which the exceedance occurred. In addition, the system shall either produce a filter profile for the filter within 7 days of the exceedance (if the system is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.

(iii) For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of three consecutive months, the system shall report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system shall conduct a self-assessment of the filter within 14 days of the exceedance and report that the self-assessment was conducted. The self assessment shall consist of at least the following components: assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report.

(iv) For any individual filter that has a measured turbidity level of greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of two consecutive months, the system shall report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system shall arrange for and conduct a comprehensive performance evaluation by the Director or a third party approved by the Director no later than 30 days following the exceedance and have the evaluation completed and submitted to the Division no later than 90 days following the exceedance.

(5) Additional reporting and recordkeeping requirements for surface water systems serving less than 10,000 population.

In addition to the reporting and recordkeeping requirements sub-sections (1), (2) and (3) above, a surface water system that provides conventional filtration treatment or direct filtration shall report monthly to the Division the information specified in paragraphs (a) and (b) of this section. In addition to the reporting and recordkeeping requirements above, a public water system subject to the requirements of this subpart that provides filtration approved under R309-530-8 or R309-530-9 shall report monthly to the Division the information specified in paragraphs (a) of this section. The reporting in paragraph (a) of this section is in lieu of the reporting specified above.

(a) Turbidity measurements, as required in R309-200-5(5)(a), shall be reported within 10 days after the end of each month the system serves water to the public. Information that shall be reported includes:

(i) The total number of filtered water turbidity measurements taken during the month.

(ii) The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to 0.3 NTU or those levels established under R309-200-5(5)(a)(ii).

(iii) The date and value of any turbidity measurements taken during the month which exceed 1 NTU for systems using conventional filtration treatment or direct filtration, or which exceed the maximum level set by the Director under R309-530-8 or R309-530-9.

(b) Systems shall maintain the results of individual filter monitoring taken under R309-215-9(1)(b) for at least three years. Systems shall record the results of individual filter

monitoring every 15 minutes. Systems shall report that they have conducted individual filter turbidity monitoring within 10 days after the end of each month the system serves water to the public. Systems shall report individual filter turbidity measurement results within 10 days after the end of each month the system serves water to the public only if measurements demonstrate one or more of the conditions in paragraphs (b)(i) through (iv) of this section. Systems that use lime softening may apply to the Director for alternative exceedance levels for the levels specified in paragraphs (b)(i) through (iv) of this section if they can demonstrate that higher turbidity levels in individual filters are due to lime carryover only and not due to degraded filter performance.

(i) For any individual filter (or CFE for systems with 2 filters that monitor CFE in lieu of individual filters) that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart, the system shall report the filter number(s), the corresponding date(s), the turbidity values which exceeded 1.0 NTU, and the cause (if known) for the exceedance(s), to the Director by the 10th of the following month.

(ii) If a system was required to report to the Director for three months in a row and turbidity exceeded 1.0 NTU in two consecutive recordings taken 15 minutes apart at the same filter (or CFE for systems with 2 filters that monitor CFE in lieu of individual filters), the system shall conduct a self-assessment of the filter within 14 days of the day the filter exceeded 1.0 NTU in two consecutive measurements for the third straight month unless a CPE as specified in paragraph (iii) of this section was required. Systems with 2 filters that monitor CFE in lieu of individual filters must conduct a self assessment on both filters. The self-assessment must consist of at least the following components: assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report. If a self-assessment is required, the date that it was triggered and the date that it was completed.

(iii) If a system was required to report to the Director for two months in a row and turbidity exceeded 2.0 NTU in two consecutive measurements taken 15 minutes apart at the same filter (or CFE for systems with 2 filters that monitor CFE in lieu of individual filters), the system shall arrange to have a comprehensive performance evaluation (CPE) conducted by the Director or a third party approved by the Director no later than 60 days following the day the filter exceeded 2.0 NTU in two consecutive measurements for the second straight month. If a CPE is required, the system must report a CPE required and the date it was triggered. If a CPE has been completed by the Director or a third party approved by the Director within the 12 prior months or the system and Division are jointly participating in an ongoing Comprehensive Technical Assistance (CTA) project at the system, a new CPE is not required. If conducted, a CPE must be completed and submitted to the Division no later than 120 days following the day the filter exceeded 2.0 NTU in two consecutive measurements for the second straight month.

(6) Additional reporting requirements.

(a) If at any time the turbidity exceeds 1 NTU in representative samples of filtered water in a system using conventional filtration treatment or direct filtration, the system shall inform the Division as soon as possible, but no later than the end of the next business day.

(b) If at any time the turbidity in representative samples of filtered water exceeds the maximum level set by the Director under R309-530-8 or R309-530-9 for filtration technologies other than conventional filtration treatment, direct filtration, slow sand filtration, or diatomaceous earth

filtration, the system shall inform the Division as soon as possible, but no later than the end of the next business day.

R309-215-10. Residual Disinfectant.

Treatment plant management shall continuously monitor disinfectant residuals and report the following to the Division within ten days after the end of each month that the system serves water to the public, except as otherwise noted:

(1) For each day, the lowest measurement of residual disinfectant concentration in mg/L in water entering the distribution system, except that if there is a failure in the continuous monitoring equipment, grab sampling every 4 hours may be conducted in lieu of continuous monitoring, but for no more than 5 working days following the failure of the equipment. Systems serving 3,300 or fewer persons may take grab samples in lieu of providing continuous monitoring on an ongoing basis at the frequencies listed in Table 215.2 below:

TABLE 215-2
RESIDUAL GRAB SAMPLE FREQUENCY

System size by population	Samples/day
Less than 500	1
501 to 1,000	2
1,001 to 2,500	3
2,501 to 3,300	4

Note: The day's samples cannot be taken at the same time. The sampling intervals are subject to Director's review and approval.

(2) The date and duration of each period when the residual disinfectant concentration in water entering the distribution system fell below 0.2 mg/L and when the Division was notified of the occurrence. The system shall notify the Division as soon as possible, but no later than by the end of the next business day. The system also shall notify the Division by the end of the next business day whether or not the residual was restored to at least 0.2 mg/L within four hours.

(3) The following information on the samples taken in the distribution system in conjunction with total coliform monitoring pursuant to R309-210-5:

(a) number of instances where the residual disinfectant concentration is measured;

(b) number of instances where the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;

(c) number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

(d) number of instances where no residual disinfectant concentration is detected and where HPC is greater than 500/ml;

(e) number of instances where the residual disinfectant concentration is not measured and HPC is greater than 500/ml;

(f) for the current and previous month the system serves water to the public, the value of "V" in the formula, $V = ((c+d+e)/(a+b)) \times 100$, where a = the value in sub-section (a) above, b = the value in sub-section (b) above, c = the value in sub-section (c) above, d = the value in sub-section (d) above, and e = the value in sub-section (e) above.

R309-215-11. Waterborne Disease Outbreak.

Each public water system, upon discovering that a waterborne disease outbreak as defined in R309-110 potentially attributable to their water system has occurred, shall report that occurrence to the Division as soon as possible, but no later than by the end of the next business day.

R309-215-12. Monitoring Requirements for Disinfection Byproducts Precursors (DBPP).

(1) Routine monitoring. Surface water systems which use conventional filtration treatment (as defined in R309-110) shall monitor each treatment plant for TOC no later than the point of combined filter effluent turbidity monitoring and representative of the treated water. All systems required to monitor under this paragraph (1) shall also monitor for TOC in the source water prior to any treatment at the same time as monitoring for TOC in the treated water. These samples (source water and treated water) are referred to as paired samples. At the same time as the source water sample is taken, all systems shall monitor for alkalinity in the source water prior to any treatment. Systems shall take one paired sample and one source water alkalinity sample per month per plant at a time representative of normal operating conditions and influent water quality.

(2) Reduced monitoring. Surface water systems with an average treated water TOC of less than 2.0 mg/L for two consecutive years, or less than 1.0 mg/L for one year, may reduce monitoring for both TOC and alkalinity to one paired sample and one source water alkalinity sample per plant per quarter. The system shall revert to routine monitoring in the month following the quarter when the annual average treated water TOC is greater than or equal to 2.0 mg/L.

(3) Compliance shall be determined as specified by R309-215-13(3). Systems may begin monitoring to determine whether Step 1 TOC removals can be met 12 months prior to the compliance date for the system. This monitoring is not required and failure to monitor during this period is not a violation. However, any system that does not monitor during this period, and then determines in the first 12 months after the compliance date that it is not able to meet the Step 1 requirements in R309-215-13(2)(b) and shall therefore apply for alternate minimum TOC removal (Step 2) requirements, is not eligible for retroactive approval of alternate minimum TOC removal (Step 2) requirements as allowed pursuant to R309-215-13(2)(c) and is in violation. Systems may apply for alternate minimum TOC removal (Step 2) requirements any time after the compliance date. For systems required to meet Step 1 TOC removals, if the value calculated under R309-215-13(3)(a)(iv) is less than 1.00, the system is in violation of the treatment technique requirements and shall notify the public pursuant to R309-220, in addition to reporting to the Director pursuant to R309-105-16.

R309-215-13. Treatment Technique for Control of Disinfection Byproduct Precursors (DBPP).

(1) Applicability.

(a) Surface water systems using conventional filtration treatment (as defined in R309-110) shall operate with enhanced coagulation or enhanced softening to achieve the TOC percent removal levels specified in paragraph (2) of this section unless the system meets at least one of the alternative compliance criteria listed in paragraph (1)(b) or (1)(c) of this section.

(b) Alternative compliance criteria for enhanced coagulation and enhanced softening systems. Surface Water Systems using conventional filtration treatment may use the alternative compliance criteria in paragraphs (1)(b)(i) through (vi) of this section to comply with this section in lieu of complying with paragraph (2) of this section. Systems shall still comply with monitoring requirements in R309-215-12.

(i) The system's source water TOC level, measured according to R309-200-4(3), is less than 2.0 mg/L, calculated quarterly as a running annual average.

(ii) The system's treated water TOC level, measured according to R309-200-4(3), is less than 2.0 mg/L, calculated quarterly as a running annual average

(iii) The system's source water TOC level, measured according to R309-200-4(3), is less than 4.0 mg/L, calculated quarterly as a running annual average; the source water alkalinity, measured according to R309-200-4(3), is greater than 60 mg/L (as CaCO₃), calculated quarterly as a running annual average; and either the TTHM and HAA5 running annual averages are no greater than 0.040 mg/L and 0.030 mg/L, respectively; or prior to the effective date for compliance in R309-210-8(1)(a), the system has made a clear and irrevocable financial commitment not later than the effective date for compliance in R309-210-8(1)(a) to use of technologies that will limit the levels of TTHMs and HAA5 to no more than 0.040 mg/L and 0.030 mg/L, respectively. Systems shall submit evidence of a clear and irrevocable financial commitment, in addition to a schedule containing milestones and periodic progress reports for installation and operation of appropriate technologies, to the Director for approval not later than the effective date for compliance in R309-210-8(1)(a). These technologies shall be installed and operating not later than June 30, 2005. Failure to install and operate these technologies by the date in the approved schedule will constitute a violation of National Primary Drinking Water Regulations.

(iv) The TTHM and HAA5 running annual averages are no greater than 0.040 mg/L and 0.030 mg/L, respectively, and the system uses only chlorine for primary disinfection and maintenance of a residual in the distribution system.

(v) The system's source water SUVA, prior to any treatment and measured monthly according to R309-200-4(3), is less than or equal to 2.0 L/mg-m, calculated quarterly as a running annual average.

(vi) The system's finished water SUVA, measured monthly according to R309-200-4(3), is less than or equal to 2.0 L/mg-m, calculated quarterly as a running annual average.

(c) Additional alternative compliance criteria for softening systems. Systems practicing enhanced softening that cannot achieve the TOC removals required by paragraph (2)(b) of this section may use the alternative compliance criteria in paragraphs (1)(c)(i) and (ii) of this section in lieu of complying with paragraph (2) of this section. Systems shall still comply with monitoring requirements in R309-210-8(4).

(i) Softening that results in lowering the treated water alkalinity to less than 60 mg/L (as CaCO₃), measured monthly according to R309-200-4(3) and calculated quarterly as a running annual average.

(ii) Softening that results in removing at least 10 mg/L of magnesium hardness (as CaCO₃), measured monthly according to R309-200-4(3) and calculated quarterly as an annual running average.

(2) Enhanced coagulation and enhanced softening performance requirements.

(a) Systems shall achieve the percent reduction of TOC specified in paragraph (2)(b) of this section between the source water and the combined filter effluent, unless the Director approves a system's request for alternate minimum TOC removal (Step 2) requirements under paragraph (2)(c) of this section.

(b) Required Step 1 TOC reductions, indicated in the following table, are based upon specified source water parameters measured in accordance with R309-200-4(3). Systems practicing softening are required to meet the Step 1 TOC reductions in the far-right column (Source water alkalinity >120 mg/L) for the specified source water TOC:

TABLE 215-3

Step 1 Required Removal of TOC by Enhanced Coagulation and Enhanced Softening for Surface Water Systems Using Conventional Treatment (notes 1,2)

Source-Water TOC,

Source-Water Alkalinity,

mg/L	mg/L as CaCO ₃		
	0-60 (percent)	>60-120 (percent)	>120 (Note 3) (percent)
>2.0-4.0	35.0%	25.0%	15.0%
>4.0-8.0	45.0%	35.0%	25.0%
>8.0	50.0%	40.0%	30.0%

Note 1: Systems meeting at least one of the conditions in paragraph (1)(b)(i)-(vi) of this section are not required to operate with enhanced coagulation.

Note 2: Softening systems meeting one of the alternative compliance criteria in paragraph (1)(c) of this section are not required to operate with enhanced softening.

Note 3: Systems practicing softening shall meet the TOC removal requirements in this column.

(c) Surface water systems using conventional treatment systems that cannot achieve the Step 1 TOC removals required by paragraph (2)(b) of this section due to water quality parameters or operational constraints shall apply to the Director, within three months of failure to achieve the TOC removals required by paragraph (2)(b) of this section, for approval of alternative minimum TOC removal (Step 2) requirements submitted by the system. If the Director approves the alternative minimum TOC removal (Step 2) requirements, the Director may make those requirements retroactive for the purposes of determining compliance. Until the Director approves the alternate minimum TOC removal (Step 2) requirements, the system shall meet the Step 1 TOC removals contained in paragraph (2)(b) of this section.

(d) Alternate minimum TOC removal (Step 2) requirements. Applications made to the Director by enhanced coagulation systems for approval of alternate minimum TOC removal (Step 2) requirements under paragraph (2)(c) of this section shall include, at a minimum, results of bench- or pilot-scale testing conducted under paragraph (2)(d)(i) of this section. The submitted bench- or pilot- scale testing shall be used to determine the alternate enhanced coagulation level.

(i) Alternate enhanced coagulation level is defined as: Coagulation at a coagulant dose and pH as determined by the method described in paragraphs (2)(d)(i) through (v) of this section such that an incremental addition of 10 mg/L of alum (or equivalent amount of ferric salt) results in a TOC removal of less than or equal to 0.3 mg/L. The percent removal of TOC at this point on the "TOC removal versus coagulant dose" curve is then defined as the minimum TOC removal required for the system. Once approved by the Director, this minimum requirement supersedes the minimum TOC removal required by the table in paragraph (2)(b) of this section. This requirement will be effective until such time as the Director approves a new value based on the results of a new bench- and pilot-scale test. Failure to achieve Director set alternative minimum TOC removal levels is a violation of R309-215-13.

(ii) Bench- or pilot-scale testing of enhanced coagulation shall be conducted by using representative water samples and adding 10 mg/L increments of alum (or equivalent amounts of ferric salt) until the pH is reduced to a level less than or equal to the enhanced coagulation Step 2 target pH shown in the following table 215-4:

TABLE 215-4
ENHANCED COAGULATION STEP 2 TARGET pH

ALKALINITY (mg/L as CaCO ₃)	TARGET pH
0-60	5.5
>60-120	6.3
>120-240	7.0
>240	7.5

(iii) For waters with alkalinities of less than 60 mg/L for which addition of small amounts of alum or equivalent addition of iron coagulant drives the pH below 5.5 before

significant TOC removal occurs, the system shall add necessary chemicals to maintain the pH between 5.3 and 5.7 in samples until the TOC removal of 0.3 mg/L per 10 mg/L alum added (or equivalent addition of iron coagulant) is reached.

(iv) The system may operate at any coagulant dose or pH necessary (consistent with other NPDWRs) to achieve the minimum TOC percent removal approved under paragraph (2)(c) of this section.

(v) If the TOC removal is consistently less than 0.3 mg/L of TOC per 10 mg/L of incremental alum dose at all dosages of alum (or equivalent addition of iron coagulant), the water is deemed to contain TOC not amenable to enhanced coagulation. The system may then apply to the Director for a waiver of enhanced coagulation requirements.

(3) Compliance Calculations.

(a) Surface Water Systems other than those identified in paragraphs (1)(b) or (1)(c) of this section shall comply with requirements contained in paragraphs (2)(b) or (2)(c) of this section. Systems shall calculate compliance quarterly, beginning after the system has collected 12 months of data, by determining an annual average using the following method:

(i) Determine actual monthly TOC percent removal, equal to: $(1 - (\text{treated water TOC} / \text{source water TOC})) \times 100$.

(ii) Determine the required monthly TOC percent removal (from either the table in paragraph (2)(b) of this section or from paragraph (2)(c) of this section).

(iii) Divide the value in paragraph (3)(a)(i) of this section by the value in paragraph (3)(a)(ii) of this section.

(iv) Add together the results of paragraph (3)(a)(iii) of this section for the last 12 months and divide by 12.

(v) If the value calculated in paragraph (3)(a)(iv) of this section is less than 1.00, the system is not in compliance with the TOC percent removal requirements.

(b) Systems may use the provisions in paragraphs (3)(b)(i) through (v) of this section in lieu of the calculations in paragraph (3)(a)(i) through (v) of this section to determine compliance with TOC percent removal requirements.

(i) In any month that the system's treated or source water TOC level, measured according to R309-200-4(3), is less than 2.0 mg/L, the system may assign a monthly value of 1.0 (in lieu of the value calculated in paragraph (3)(a)(iii) of this section) when calculating compliance under the provisions of paragraph (3)(a) of this section.

(ii) In any month that a system practicing softening removes at least 10 mg/L of magnesium hardness (as CaCO₃), the system may assign a monthly value of 1.0 (in lieu of the value calculated in paragraph (3)(a)(iii) of this section) when calculating compliance under the provisions of paragraph (3)(a) of this section.

(iii) In any month that the system's source water SUVA, prior to any treatment and measured according to R309-200-4(3), is less than or equal to 2.0 L/mg-m, the system may assign a monthly value of 1.0 (in lieu of the value calculated in paragraph (3)(a)(iii) of this section) when calculating compliance under the provisions of paragraph (3)(a) of this section.

(iv) In any month that the system's finished water SUVA, measured according to R309-200-4(3), is less than or equal to 2.0 L/mg-m, the system may assign a monthly value of 1.0 (in lieu of the value calculated in paragraph (3)(a)(iii) of this section) when calculating compliance under the provisions of paragraph (3)(a) of this section.

(v) In any month that a system practicing enhanced softening lowers alkalinity below 60 mg/L (as CaCO₃), the system may assign a monthly value of 1.0 (in lieu of the value calculated in paragraph (3)(a)(iii) of this section) when calculating compliance under the provisions of paragraph (3)(a) of this section.

(c) Surface Water Systems using conventional treatment may also comply with the requirements of this section by meeting the criteria in paragraph (1)(b) or (c) of this section.

(4) Treatment Technique Requirements for DBP Precursors. The Director identifies the following as treatment techniques to control the level of disinfection byproduct precursors in drinking water treatment and distribution systems: For Surface Water Systems using conventional treatment, enhanced coagulation or enhanced softening.

R309-215-14. Disinfection Profiling and Benchmarking.

A disinfection profile is a graphical representation of your system's level of *Giardia lamblia* or virus inactivation measured during the course of a year. Community or non-transient non-community water systems which use surface water or ground water under the direct influence of surface water must develop a disinfection profile unless the Director determines that a system's profile is unnecessary. The Director may approve the use of a more representative data set for disinfection profiling than the data set required under R309-215-14.

(1) Determination of systems required to profile. A public water system subject to the requirements of this subpart shall determine its TTHM annual average using the procedure in paragraph (1)(a) of this section and its HAA5 annual average using the procedure in paragraph (1)(b) of this section. The annual average is the arithmetic average of the quarterly averages of four consecutive quarters of monitoring.

(a) The TTHM annual average shall be the annual average during the same period as is used for the HAA5 annual average.

(i) Those systems that collected data under the provisions of 40 CFR 141.142 subpart M (Information Collection Rule) shall use the results of the samples collected during the last four quarters of required monitoring.

(ii) Those systems that use grandfathered HAA5 occurrence data that meet the provisions of paragraph (1)(b)(ii) of this section shall use TTHM data collected at the same time under the provisions of R309-200-5(3)(c)(vii) and R309-210-9.

(iii) Those systems that use HAA5 occurrence data that meet the provisions of paragraph (1)(b)(iii)(A) of this section shall use TTHM data collected at the same time under the provisions of R309-200-5(3)(c)(vii) and R309-210-9.

(b) The HAA5 annual average shall be the annual average during the same period as is used for the TTHM annual average.

(i) Those systems that collected data under the provisions of 40 CFR 141.142 subpart M (Information Collection Rule) shall use the results of the samples collected during the last four quarters of required monitoring.

(ii) Those systems that have collected four quarters of HAA5 occurrence data that meets the routine monitoring sample number and location requirements for TTHM in R309-200-5(3)(c)(vii) and R309-210-9 and handling and analytical method requirements of R309-200-4(3) may use those data to determine whether the requirements of this section apply.

(iii) Those systems that have not collected four quarters of HAA5 occurrence data that meets the provisions of either paragraph (1)(b)(i) or (ii) of this section by March 16, 1999 shall either:

(A) Conduct monitoring for HAA5 that meets the routine monitoring sample number and location requirements for TTHM in R309-200-5(3)(c)(vii) and R309-210-9 and handling and analytical method requirements of R309-200-4(3) to determine the HAA5 annual average and whether the requirements of paragraph (2) of this section apply. This monitoring shall be completed so that the applicability

determination can be made no later than March 31, 2000, or

(B) Comply with all other provisions of this section as if the HAA5 monitoring had been conducted and the results required compliance with paragraph (2) of this section.

(c) The system may request that the Director approve a more representative annual data set than the data set determined under paragraph (1)(a) or (b) of this section for the purpose of determining applicability of the requirements of this section.

(d) The Director may require that a system use a more representative annual data set than the data set determined under paragraph (1)(a) or (b) of this section for the purpose of determining applicability of the requirements of this section.

(e) The system shall submit data to the Director on the schedule in paragraphs (1)(e)(i) through (v) of this section.

(i) Those systems that collected TTHM and HAA5 data under the provisions of subpart M (Information Collection Rule), as required by paragraphs (1)(a)(i) and (1)(b)(i) of this section, shall submit the results of the samples collected during the last 12 months of required monitoring under 40 CFR section 141.142 (Information Collection Rule) not later than December 31, 1999.

(ii) Those systems that have collected four consecutive quarters of HAA5 occurrence data that meets the routine monitoring sample number and location for TTHM in R309-200-5(3)(c)(vii) and R309-210-9 and handling and analytical method requirements of R309-200-4(3), as allowed by paragraphs (1)(a)(ii) and (1)(b)(ii) of this section, shall submit those data to the Director not later April 16, 1999. Until the Director has approved the data, the system shall conduct monitoring for HAA5 using the monitoring requirements specified under paragraph (1)(b)(iii) of this section.

(iii) Those systems that conduct monitoring for HAA5 using the monitoring requirements specified by paragraphs (1)(a)(iii) and (1)(b)(iii)(A) of this section, shall submit TTHM and HAA5 data not later than April 1, 2000.

(iv) Those systems that elect to comply with all other provisions of this section as if the HAA5 monitoring had been conducted and the results required compliance with this section, as allowed under paragraphs (1)(b)(iii)(B) of this section, shall notify the Director in writing of their election not later than December 31, 1999.

(v) If the system elects to request that the Director approve a more representative annual data set than the data set determined under paragraph (1)(b)(i) of this section, the system shall submit this request in writing not later than December 31, 1999.

(f) Any system having either a TTHM annual average greater than or equal to 0.064 mg/L or an HAA5 annual average greater than or equal to 0.048 mg/L during the period identified in paragraphs (1)(a) and (b) of this section shall comply with paragraph (2) of this section.

(g) The Director may only determine that a system's profile is unnecessary if a system's TTHM and HAA5 levels are below 0.064 mg/L and 0.048 mg/L, respectively. To determine these levels, TTHM and HAA5 samples must be collected after January 1, 1998, during the month with the warmest water temperature, and at the point of maximum residence time in your distribution system. The Director may approve a more representative TTHM and HAA5 data set to determine these levels.

(2) Disinfection profiling.

(a) Any system that is required by paragraph (1) of this section shall develop a disinfection profile of its disinfection practice for a period of up to three years. A disinfection profile consists of the following 3 steps:

(i) The system must collect data for several parameters from the plant over the course of 12 months. If your system serves between 500 and 9,999 persons you must begin to

collect data no later than July 1, 2003. If your system serves fewer than 500 persons you must begin to collect data no later than January 1, 2004. If your system serves 10,000 persons or greater than the requirements of R309-215-14(2) are only required if it meets the criteria in paragraph R309-215-14(1)(f).

(ii) The system must use this data to calculate weekly log inactivation as discussed in paragraph (d) of this section.

(iii) The system must use these weekly log inactivations to develop a disinfection profile.

(b) The system shall monitor daily for a period of 12 consecutive calendar months to determine the total logs of inactivation for each day of operation, based on the CT_{99.9} values in Tables 1.1-1.6, 2.1, and 3.1 of Section 141.74(b)(3) in the code of Federal Regulations (also available from the Division), as appropriate, through the entire treatment plant. This system shall begin this monitoring not later than April 1, 2000. As a minimum, the system with a single point of disinfectant application prior to entrance to the distribution system shall conduct the monitoring in paragraphs (2)(b)(i) through (iv) of this section. A system with more than one point of disinfectant application shall conduct the monitoring in paragraphs (2)(b)(i) through (iv) of this section for each disinfection segment. The system shall monitor the parameters necessary to determine the total inactivation ratio, using analytical methods in R309-200-4(3), as follows:

(i) The temperature of the disinfected water shall be measured once per day at each residual disinfectant concentration sampling point during peak hourly flow.

(ii) If the system uses chlorine, the pH of the disinfected water shall be measured once per day at each chlorine residual disinfectant concentration sampling point during peak hourly flow.

(iii) The disinfectant contact time(s) ("T") shall be determined for each day during peak hourly flow.

(iv) The residual disinfectant concentration(s) ("C") of the water before or at the first customer and prior to each additional point of disinfection shall be measured each day during peak hourly flow.

(v) For systems serving less than 10,000 persons, the above parameters shall be monitored once per week on the same calendar day, over 12 consecutive months for the purposes of disinfection profiling.

(c) In lieu of the monitoring conducted under the provisions of paragraph (2)(b) of this section to develop the disinfection profile, the system may elect to meet the requirements of paragraph (2)(c)(i) of this section. In addition to the monitoring conducted under the provisions of paragraph (2)(b) of this section to develop the disinfection profile, the system may elect to meet the requirements of paragraph (2)(c)(ii) of this section.

(i) A PWS that has three years of existing operational data may submit those data, a profile generated using those data, and a request that the Director approve use of those data in lieu of monitoring under the provisions of paragraph (2)(b) of this section not later than March 31, 2000. The Director shall determine whether these operational data are substantially equivalent to data collected under the provisions of paragraph (2)(b) of this section. These data shall also be representative of *Giardia lamblia* inactivation through the entire treatment plant and not just of certain treatment segments. Until the Director approves this request, the system is required to conduct monitoring under the provisions of paragraph (2)(b) of this section.

(ii) In addition to the disinfection profile generated under paragraph (2)(b) of this section, a PWS that has existing operational data may use those data to develop a disinfection profile for additional years. Such systems may use these additional yearly disinfection profiles to develop a

benchmark under the provisions of paragraph (3) of this section. The Director shall determine whether these operational data are substantially equivalent to data collected under the provisions of paragraph (2)(b) of this section. These data shall also be representative of inactivation through the entire treatment plant and not just of certain treatment segments.

(d) The system shall calculate the total inactivation ratio as follows:

(i) If the system uses only one point of disinfectant application, the system may determine the total inactivation ratio for the disinfection segment based on either of the methods in paragraph (2)(d)(i)(A) or (2)(d)(i)(B) of this section.

(A) Determine one inactivation ratio ($CT_{calc}/CT_{99.9}$) before or at the first customer during peak hourly flow.

(B) Determine successive $CT_{calc}/CT_{99.9}$ values, representing sequential inactivation ratios, between the point of disinfectant application and a point before or at the first customer during peak hourly flow. Under this alternative, the system shall calculate the total inactivation ratio by determining ($CT_{calc}/CT_{99.9}$) for each sequence and then adding the ($CT_{calc}/CT_{99.9}$) values together to determine sum of ($CT_{calc}/CT_{99.9}$).

(ii) If the system uses more than one point of disinfectant application before the first customer, the system shall determine the CT value of each disinfection segment immediately prior to the next point of disinfectant application, or for the final segment, before or at the first customer, during peak hourly flow. The ($CT_{calc}/CT_{99.9}$) value of each segment and sum of ($CT_{calc}/CT_{99.9}$) shall be calculated using the method in paragraph (b)(4)(i) of this section.

(iii) The system shall determine the total logs of inactivation by multiplying the value calculated in paragraph (2)(d)(i) or (ii) of this section by 3.0.

(e) A system that uses either chloramines and chlorine dioxide or ozone for primary disinfection shall also calculate the logs of inactivation for viruses using a method approved by the Director.

(f) The system shall retain disinfection profile data in graphic form, as a spreadsheet, or in some other format acceptable to the Director for review as part of sanitary surveys conducted by the Director.

(3) Disinfection Benchmarking

(a) Any system required to develop a disinfection profile under the provisions of paragraphs (1) and (2) of this section and that decides to make a significant change to its disinfection practice shall consult with the Director prior to making such change. Significant changes to disinfection practice are:

(i) Changes to the point of disinfection;

(ii) Changes to the disinfectant(s) used in the treatment plant;

(iii) Changes to the disinfection process; and

(iv) Any other modification identified by the Director.

(b) Any system that is modifying its disinfection practice shall calculate its disinfection benchmark using the procedure specified in paragraphs (3)(b)(i) through (ii) of this section.

(i) For each year of profiling data collected and calculated under paragraph (2) of this section, the system shall determine the lowest average monthly *Giardia lamblia* inactivation in each year of profiling data. The system shall determine the average *Giardia lamblia* inactivation for each calendar month for each year of profiling data by dividing the sum of daily *Giardia lamblia* of inactivation by the number of values calculated for that month.

(ii) The disinfection benchmark is the lowest monthly average value (for systems with one year of profiling data) or

average of lowest monthly average values (for systems with more than one year of profiling data) of the monthly logs of *Giardia lamblia* inactivation in each year of profiling data.

(c) A system that uses either chloramines, ozone or chlorine dioxide for primary disinfection must calculate the disinfection benchmark from the data the system collected for viruses to develop the disinfection profile in addition to the *Giardia lamblia* disinfection benchmark calculated under paragraph (b)(i) above. This viral benchmark must be calculated in the same manner used to calculate the *Giardia lamblia* disinfection benchmark in paragraph (b)(i).

(d) The system shall submit information in paragraphs (3)(d)(i) through (iv) of this section to the Director as part of its consultation process.

- (i) A description of the proposed change;
- (ii) The disinfection profile for *Giardia lamblia* (and, if necessary, viruses) under paragraph (2) of this section and benchmark as required by paragraph (3)(b) of this section; and
- (iii) An analysis of how the proposed change will affect the current levels of disinfection.
- (iv) Any additional information requested by the Director.

R309-215-15. Enhanced Treatment for Cryptosporidium (Federal Subpart W).

- (1) General requirements.
 - (a) The rule requirements of this section establish or extend treatment technique requirements in lieu of maximum contaminant levels for *Cryptosporidium*. These requirements are in addition to requirements for filtration and disinfection in R309-200 and other parts of R309-215.
 - (b) Applicability. The requirements of this subpart apply to all surface water systems, which are public water systems supplied by a surface water source and public water systems supplied by a ground water source under the direct influence of surface water.
 - (i) Wholesale systems, as defined in R309-110, must comply with the requirements of this section based on the population of the largest system in the combined distribution system.
 - (ii) The requirements of this sub-section apply to systems required by these rules to provide filtration treatment, whether or not the system is currently operating a filtration system.
 - (c) Requirements. Systems subject to this subpart must comply with the following requirements:
 - (i) Systems must conduct an initial and a second round of source water monitoring for each plant that treats a surface water or GWUDI source. This monitoring may include sampling for *Cryptosporidium*, *E. coli*, and turbidity as described in R309-215-15(2) through R309-215-15(7), to determine what level, if any, of additional *Cryptosporidium* treatment they must provide.
 - (ii) Systems that plan to make a significant change to their disinfection practice must develop disinfection profiles and calculate disinfection benchmarks, as described in R309-215-15(9) through R309-215-15(10).
 - (iii) Filtered systems must determine their *Cryptosporidium* treatment bin classification as described in R309-215-15(11) and provide additional treatment for *Cryptosporidium*, if required, as described in R309-215-15(12). Filtered must implement *Cryptosporidium* treatment according to the schedule in R309-215-14.
 - (iv) Systems required to provide additional treatment for *Cryptosporidium* must implement microbial toolbox options that are designed and operated as described in R309-215-15(15) through R309-215-15(20).
 - (v) Systems must comply with the applicable

recordkeeping and reporting requirements described in R309-215-15(21) through R309-215-15(22).

(vi) Systems must address significant deficiencies identified in sanitary surveys performed by EPA as described in R309-215-15(22).

(2) Source Water Monitoring Requirements.

(a) Initial round of source water monitoring. Systems must conduct the following monitoring on the schedule in paragraph (c) of this section unless they meet the monitoring exemption criteria in paragraph (d) of this section.

(i) Filtered systems serving at least 10,000 people must sample their source water for *Cryptosporidium*, *E. coli*, and turbidity at least monthly for 24 months.

(ii) (A) Filtered systems serving fewer than 10,000 people must sample their source water for *E. coli* at least once every two weeks for 12 months.

(B) A filtered system serving fewer than 10,000 people may avoid *E. coli* monitoring if the system notifies the Director that it will monitor for *Cryptosporidium* as described in paragraph (a)(iv) of this section. The system must notify the Director no later than 3 months prior to the date the system is otherwise required to start *E. coli* monitoring under R309-215-15(2)(c).

(iii) Filtered systems serving fewer than 10,000 people must sample their source water for *Cryptosporidium* at least twice per month for 12 months or at least monthly for 24 months if they meet one of the following, based on monitoring conducted under paragraph (a)(iii) of this section:

(A) For systems using lake/reservoir sources, the annual mean *E. coli* concentration is greater than 10 *E. coli*/100 mL.

(B) For systems using flowing stream sources, the annual mean *E. coli* concentration is greater than 50 *E. coli*/100 mL.

(C) The system does not conduct *E. coli* monitoring as described in paragraph (a)(iii) of this section.

(D) Systems using ground water under the direct influence of surface water (GWUDI) must comply with the requirements of paragraph (a)(iv) of this section based on the *E. coli* level that applies to the nearest surface water body. If no surface water body is nearby, the system must comply based on the requirements that apply to systems using lake/reservoir sources.

(iv) For filtered systems serving fewer than 10,000 people, the Director may approve monitoring for an indicator other than *E. coli* under paragraph (a)(ii) of this section. The Director also may approve an alternative to the *E. coli* concentration in paragraph (a)(iii)(A), (B) or (D) of this section to trigger *Cryptosporidium* monitoring. This approval by the Director must be provided to the system in writing and must include the basis for the Director's determination that the alternative indicator and/or trigger level will provide a more accurate identification of whether a system will exceed the Bin 1 *Cryptosporidium* level in R309-215-15(11).

(v) Systems may sample more frequently than required under this section if the sampling frequency is evenly spaced throughout the monitoring period.

(b) Second round of source water monitoring. Systems must conduct a second round of source water monitoring that meets the requirements for monitoring parameters, frequency, and duration described in paragraph (a) of this section, unless they meet the monitoring exemption criteria in paragraph (d) of this section. Systems must conduct this monitoring on the schedule in paragraph (c) of this section.

(c) Monitoring schedule. Systems must begin the monitoring required in paragraphs (a) and (b) of this section no later than the month beginning with the date listed:

- (i) Systems that serve at least 100,000 people must:
 - (A) begin the first round of source water monitoring no later than October 1, 2006; and

(B) begin the second round of source water monitoring no later than April 1, 2015.

(ii) Systems that serve from 50,000 to 99,999 people must:

(A) begin the first round of source water monitoring no later than April 1, 2007; and

(B) begin the second round of source water monitoring no later than October 1, 2015.

(iii) Systems that serve from 10,000 to 49,999 people must:

(A) begin the first round of source water monitoring no later than April 1, 2008; and

(B) begin the second round of source water monitoring no later than October 1, 2016.

(iv) Systems that serve less than 10,000 people and monitor for E. coli must:

(A) begin the first round of source water monitoring no later than October 1, 2008; and

(B) begin the second round of source water monitoring no later than October 1, 2017.

(C) Applies only to filtered systems.

(v) Systems that serve less than 10,000 people and monitor for Cryptosporidium must:

(A) begin the first round of source water monitoring no later than April 1, 2010; and

(B) begin the second round of source water monitoring no later than April 1, 2019.

(C) Applies to filtered systems that meet the conditions of paragraph (a)(iii) of this section.

(d) Monitoring avoidance.

(i) Filtered systems are not required to conduct source water monitoring under this sub-section if the system will provide a total of at least 5.5-log of treatment for Cryptosporidium, equivalent to meeting the treatment requirements of Bin 4 in R309-215-15(12).

(ii) If a system chooses to provide the level of treatment in paragraph (d)(i) of this section rather than start source monitoring, the system must notify the Director in writing no later than the date the system is otherwise required to submit a sampling schedule for monitoring under R309-215-15(3). Alternatively, a system may choose to stop sampling at any point after it has initiated monitoring if it notifies the Director in writing that it will provide this level of treatment. Systems must install and operate technologies to provide this level of treatment by the applicable compliance dates in R309-215-15(13).

(e) Plants operating only part of the year. Systems with surface water plants that operate for only part of the year must conduct source water monitoring in accordance with this subpart, but with the following modifications:

(i) Systems must sample their source water only during the months that the plant operates unless the Director specifies another monitoring period based on plant operating practices.

(ii) Systems with plants that operate less than six months per year and that monitor for Cryptosporidium must collect at least six Cryptosporidium samples per year during each of two years of monitoring. Samples must be evenly spaced throughout the period the plant operates.

(f)(i) New sources. A system that begins using a new source of surface water or GWUDI after the system is required to begin monitoring under paragraph (c) of this section must monitor the new source on a schedule the Director approves. Source water monitoring must meet the requirements of this sub-section. The system must also meet the bin classification and Cryptosporidium treatment requirements of R309-215-15(11) and (12) for the new source on a schedule the Director approves.

(ii) The requirements of R309-215-15(2)(f) apply to

surface water systems that begin operation after the monitoring start date applicable to the system's size under paragraph (c) of this section.

(iii) The system must begin a second round of source water monitoring no later than 6 years following initial bin classification under R309-215-15(11).

(g) Failure to collect any source water sample required under this section in accordance with the sampling schedule, sampling location, analytical method, approved laboratory, and reporting requirements of R309-215-15(3) through R309-215-15(7) is a monitoring violation.

(h) Grandfathering monitoring data. Systems may use (grandfather) monitoring data collected prior to the applicable monitoring start date in paragraph (c) of this section to meet the initial source water monitoring requirements in paragraph (a) of this section. Grandfathered data may substitute for an equivalent number of months at the end of the monitoring period. All data submitted under this paragraph must meet the requirements in R309-215-15(8).

(3) Sampling schedules.

(a) Systems required to conduct source water monitoring under R309-215-15(2) must submit a sampling schedule that specifies the calendar dates when the system will collect each required sample.

(i) Systems must submit sampling schedules no later than 3 months prior to the applicable date listed in R309-215-15(2)(c) for each round of required monitoring.

(ii) (A) Systems serving at least 10,000 people must submit their sampling schedule for the initial round of source water monitoring under R309-215-15(2)(a) to EPA electronically at <https://intranet.epa.gov/lt2/>.

(B) If a system is unable to submit the sampling schedule electronically, the system may use an alternative approach for submitting the sampling schedule that EPA approves.

(iii) Systems serving fewer than 10,000 people must submit their sampling schedules for the initial round of source water monitoring R309-215-15(2)(a) to the Director.

(iv) Systems must submit sampling schedules for the second round of source water monitoring R309-215-15(2)(b) to the Director.

(v) If EPA or the Director does not respond to a system regarding its sampling schedule, the system must sample at the reported schedule.

(b) Systems must collect samples within two days before or two days after the dates indicated in their sampling schedule (i.e., within a five-day period around the schedule date) unless one of the conditions of paragraph (b)(i) or (ii) of this section applies.

(i) If an extreme condition or situation exists that may pose danger to the sample collector, or that cannot be avoided and causes the system to be unable to sample in the scheduled five-day period, the system must sample as close to the scheduled date as is feasible unless the Director approves an alternative sampling date. The system must submit an explanation for the delayed sampling date to the Director concurrent with the shipment of the sample to the laboratory.

(ii)(A) If a system is unable to report a valid analytical result for a scheduled sampling date due to equipment failure, loss of or damage to the sample, failure to comply with the analytical method requirements, including the quality control requirements in R309-215-15(5), or the failure of an approved laboratory to analyze the sample, then the system must collect a replacement sample.

(B) The system must collect the replacement sample not later than 21 days after receiving information that an analytical result cannot be reported for the scheduled date unless the system demonstrates that collecting a replacement sample within this time frame is not feasible or the Director

approves an alternative resampling date. The system must submit an explanation for the delayed sampling date to the Director concurrent with the shipment of the sample to the laboratory.

(c) Systems that fail to meet the criteria of paragraph (b) of this section for any source water sample required under R309-215-15(2) must revise their sampling schedules to add dates for collecting all missed samples. Systems must submit the revised schedule to the Director for approval prior to when the system begins collecting the missed samples.

(4) Sampling locations.

(a) Systems required to conduct source water monitoring under R309-215-15(2) must collect samples for each plant that treats a surface water or GWUDI source. Where multiple plants draw water from the same influent, such as the same pipe or intake, the Director may approve one set of monitoring results to be used to satisfy the requirements of R309-215-15(2) for all plants.

(b) (i) Systems must collect source water samples prior to chemical treatment, such as coagulants, oxidants and disinfectants, unless the system meets the condition of paragraph (b)(ii) of this section.

(ii) The Director may approve a system to collect a source water sample after chemical treatment. To grant this approval, the Director must determine that collecting a sample prior to chemical treatment is not feasible for the system and that the chemical treatment is unlikely to have a significant adverse effect on the analysis of the sample.

(c) Systems that recycle filter backwash water must collect source water samples prior to the point of filter backwash water addition.

(d) Bank filtration.

(i) Systems that receive Cryptosporidium treatment credit for bank filtration under R309-200-5(5)(a)(ii) must collect source water samples in the surface water prior to bank filtration.

(ii) Systems that use bank filtration as pretreatment to a filtration plant must collect source water samples from the well (i.e., after bank filtration). Use of bank filtration during monitoring must be consistent with routine operational practice. Systems collecting samples after a bank filtration process may not receive treatment credit for the bank filtration under R309-215-15(16)(c).

(e) Multiple sources. Systems with plants that use multiple water sources, including multiple surface water sources and blended surface water and ground water sources, must collect samples as specified in paragraph (e)(i) or (ii) of this section. The use of multiple sources during monitoring must be consistent with routine operational practice.

(i) If a sampling tap is available where the sources are combined prior to treatment, systems must collect samples from the tap.

(ii) If a sampling tap where the sources are combined prior to treatment is not available, systems must collect samples at each source near the intake on the same day and must follow either paragraph (e)(ii)(A) or (B) of this section for sample analysis.

(A) Systems may composite samples from each source into one sample prior to analysis. The volume of sample from each source must be weighted according to the proportion of the source in the total plant flow at the time the sample is collected.

(B) Systems may analyze samples from each source separately and calculate a weighted average of the analysis results for each sampling date. The weighted average must be calculated by multiplying the analysis result for each source by the fraction the source contributed to total plant flow at the time the sample was collected and then summing these values.

(f) Additional Requirements. Systems must submit a

description of their sampling location(s) to the Director at the same time as the sampling schedule required under R309-215-15(3). This description must address the position of the sampling location in relation to the system's water source(s) and treatment processes, including pretreatment, points of chemical treatment, and filter backwash recycle. If the Director does not respond to a system regarding sampling location(s), the system must sample at the reported location(s).

(5) Analytical methods.

(a) Cryptosporidium. Systems must analyze for Cryptosporidium using Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 2005, United States Environmental Protection Agency, EPA-815-R-05-002 or Method 1622: Cryptosporidium in Water by Filtration/IMS/FA, 2005, United States Environmental Protection Agency, EPA-815-R-05-001, which are incorporated by reference. You may obtain a copy of these methods online from <http://www.epa.gov/safewater/disinfection/lt2> or from the United States Environmental Protection Agency, Office of Ground Water and Drinking Water, 1201 Constitution Ave., NW, Washington, DC 20460 (Telephone: 800-426-4791). You may inspect a copy at the Water Docket in the EPA Docket Center, 1301 Constitution Ave., NW, Washington, DC, (Telephone: 202-566-2426) or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. You may also obtain a copy of these methods by contacting the Division of Drinking Water at 801-536-4200.

(i) Systems must analyze at least a 10 L sample or a packed pellet volume of at least 2 mL as generated by the methods listed in paragraph (a) of this section. Systems unable to process a 10 L sample must analyze as much sample volume as can be filtered by two filters approved by EPA for the methods listed in paragraph (a) of this section, up to a packed pellet volume of at least 2 mL.

(ii) (A) Matrix spike (MS) samples, as required by the methods in paragraph (a) of this section, must be spiked and filtered by a laboratory approved for Cryptosporidium analysis under R309-215-15(6).

(B) If the volume of the MS sample is greater than 10 L, the system may filter all but 10 L of the MS sample in the field, and ship the filtered sample and the remaining 10 L of source water to the laboratory. In this case, the laboratory must spike the remaining 10 L of water and filter it through the filter used to collect the balance of the sample in the field.

(iii) Flow cytometer-counted spiking suspensions must be used for MS samples and ongoing precision and recovery (OPR) samples.

(b) E. coli. Systems must use methods for enumeration of E. coli in source water approved in R309-200-4(3) and (4).

(i) The time from sample collection to initiation of analysis may not exceed 30 hours unless the system meets the condition of paragraph (b)(ii) of this section.

(ii) The Director may approve on a case-by-case basis the holding of an E. coli sample for up to 48 hours between sample collection and initiation of analysis if the Director determines that analyzing an E. coli sample within 30 hours is not feasible. E. coli samples held between 30 to 48 hours must be analyzed by the Colilert reagent version of Standard Method 9223B as listed in R309-200-4(3) and (4).

(iii) Systems must maintain samples between 0 deg.C and 10 deg. C during storage and transit to the laboratory.

(c) Turbidity. Systems must use methods for turbidity measurement approved in R309-200-4(3) and (4).

(6) Approved laboratories.

(a) Cryptosporidium. Systems must have Cryptosporidium samples analyzed by a laboratory that is approved under EPA's Laboratory Quality Assurance Evaluation Program for Analysis of Cryptosporidium in Water or a laboratory that has been certified for Cryptosporidium analysis by an equivalent State laboratory certification program.

(b) E. coli. Any laboratory certified by the EPA, the National Environmental Laboratory Accreditation Conference or the State for total coliform or fecal coliform analysis under R309-200-4(3) and (4) is approved for E. coli analysis under this subpart when the laboratory uses the same technique for E. coli that the laboratory uses for R309-200-4(3), (4) and in R444-14-4(1).

(c) Turbidity. Measurements of turbidity must be made by a party approved by the State.

(7) Reporting source water monitoring results.

(a) Systems must report results from the source water monitoring required under R309-215-15(2) no later than 10 days after the end of the first month following the month when the sample is collected.

(b) (i) All systems serving at least 10,000 people must report the results from the initial source water monitoring required under R309-215-15(2)(a) to EPA electronically at <https://intranet.epa.gov/lt2/>.

(ii) If a system is unable to report monitoring results electronically, the system may use an alternative approach for reporting monitoring results that EPA approves.

(c) Systems serving fewer than 10,000 people must report results from the initial source water monitoring required under R309-215-15(2)(a) to the Director.

(d) All systems must report results from the second round of source water monitoring required under R309-215-15(2)(b) to the Director.

(e) Systems must report the applicable information in paragraphs (e)(i) and (ii) of this section for the source water monitoring required under R309-215-15(2).

(i) Systems must report the following data elements for each Cryptosporidium analysis:

- (A) PWS ID.
- (B) Facility ID.
- (C) Sample collection date.
- (D) Sample type (field or matrix spike).
- (E) Sample volume filtered (L), to nearest 1/4 L.
- (F) Was 100% of filtered volume examined.
- (G) Number of oocysts counted.

(H) For matrix spike samples, systems must also report the sample volume spiked and estimated number of oocysts spiked. These data are not required for field samples.

(I) For samples in which less than 10 L is filtered or less than 100% of the sample volume is examined, systems must also report the number of filters used and the packed pellet volume.

(J) For samples in which less than 100% of sample volume is examined, systems must also report the volume of resuspended concentrate and volume of this resuspension processed through immunomagnetic separation.

(ii) Systems must report the following data elements for each E. coli analysis:

- (A) PWS ID.
- (B) Facility ID.
- (C) Sample collection date.
- (D) Analytical method number.
- (E) Method type.
- (F) Source type (flowing stream, lake/reservoir, GWUDI).
- (G) E. coli/100 mL.
- (H) Turbidity. (Systems serving fewer than 10,000

people that are not required to monitor for turbidity under R309-215-15(2) are not required to report turbidity with their E. coli results.)

(8) Grandfathering previously collected data.

(a) (i) Systems may comply with the initial source water monitoring requirements of R309-215-15(2)(a) by grandfathering sample results collected before the system is required to begin monitoring (i.e., previously collected data). To be grandfathered, the sample results and analysis must meet the criteria in this section and the Director must approve.

(ii) A filtered system may grandfather Cryptosporidium samples to meet the requirements of R309-215-15(2)(a) when the system does not have corresponding E. coli and turbidity samples. A system that grandfathers Cryptosporidium samples without E. coli and turbidity samples is not required to collect E. coli and turbidity samples when the system completes the requirements for Cryptosporidium monitoring under R309-215-15(2)(a).

(b) E. coli sample analysis. The analysis of E. coli samples must meet the analytical method and approved laboratory requirements of R309-215-15(5) through R309-215-15(6).

(c) Cryptosporidium sample analysis. The analysis of Cryptosporidium samples must meet the criteria in this paragraph.

(i) Laboratories analyzed Cryptosporidium samples using one of the analytical methods in paragraphs (c)(i)(A) through (D) of this section, which are incorporated by reference. You may obtain a copy of these methods on-line from the United States Environmental Protection Agency, Office of Ground Water and Drinking Water, 1201 Constitution Ave, NW, Washington, DC 20460 (Telephone: 800-426-4791). You may inspect a copy at the Water Docket in the EPA Docket Center, 1301 Constitution Ave., NW, Washington, DC, (Telephone: 202-566-2426) or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. You may also obtain a copy of these methods by contacting the Division of Drinking Water at 801-536-4200.

(A) Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 2005, United States Environmental Protection Agency, EPA-815-R-05-002.

(B) Method 1622: Cryptosporidium in Water by Filtration/IMS/FA, 2005, United States Environmental Protection Agency, EPA-815-R-05-001.

(C) Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 2001, United States Environmental Protection Agency, EPA-821-R-01-025.

(D) Method 1622: Cryptosporidium in Water by Filtration/IMS/FA, 2001, United States Environmental Protection Agency, EPA-821-R-01-026.

(E) Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 1999, United States Environmental Protection Agency, EPA-821-R-99-006.

(F) Method 1622: Cryptosporidium in Water by Filtration/IMS/FA, 1999, United States Environmental Protection Agency, EPA-821-R-99-001.

(ii) For each Cryptosporidium sample, the laboratory analyzed at least 10 L of sample or at least 2 mL of packed pellet or as much volume as could be filtered by 2 filters that EPA approved for the methods listed in paragraph (c)(1) of this section.

(d) Sampling location. The sampling location must meet the conditions in R309-215-15(4).

(e) Sampling frequency. Cryptosporidium samples were

collected no less frequently than each calendar month on a regular schedule, beginning no earlier than January 1999. Sample collection intervals may vary for the conditions specified in R309-215-15(3)(b)(i) and (ii) if the system provides documentation of the condition when reporting monitoring results.

(i) The Director may approve grandfathering of previously collected data where there are time gaps in the sampling frequency if the system conducts additional monitoring the Director specifies to ensure that the data used to comply with the initial source water monitoring requirements of R309-215-15(2)(a) are seasonally representative and unbiased.

(ii) Systems may grandfather previously collected data where the sampling frequency within each month varied. If the Cryptosporidium sampling frequency varied, systems must follow the monthly averaging procedure in R309-215-15(11)(b)(v) when calculating the bin classification for filtered systems.

(f) Reporting monitoring results for grandfathering. Systems that request to grandfather previously collected monitoring results must report the following information by the applicable dates listed in this paragraph. Systems serving at least 10,000 people must report this information to EPA unless the Director approves reporting to the Director rather than EPA. Systems serving fewer than 10,000 people must report this information to the Director.

(i) Systems must report that they intend to submit previously collected monitoring results for grandfathering. This report must specify the number of previously collected results the system will submit, the dates of the first and last sample, and whether a system will conduct additional source water monitoring to meet the requirements of R309-215-15(2)(a). Systems must report this information no later than the date the sampling schedule under R309-215-15(3) is required.

(ii) Systems must report previously collected monitoring results for grandfathering, along with the associated documentation listed in paragraphs (f)(ii)(A) through (D) of this section, no later than two months after the applicable date listed in R309-215-15(2)(c).

(A) For each sample result, systems must report the applicable data elements in R309-215-15(7).

(B) Systems must certify that the reported monitoring results include all results the system generated during the time period beginning with the first reported result and ending with the final reported result. This applies to samples that were collected from the sampling location specified for source water monitoring under this subpart, not spiked, and analyzed using the laboratory's routine process for the analytical methods listed in this section.

(C) Systems must certify that the samples were representative of a plant's source water(s) and the source water(s) have not changed. Systems must report a description of the sampling location(s), which must address the position of the sampling location in relation to the system's water source(s) and treatment processes, including points of chemical addition and filter backwash recycle.

(D) For Cryptosporidium samples, the laboratory or laboratories that analyzed the samples must provide a letter certifying that the quality control criteria specified in the methods listed in paragraph (c)(i) of this section were met for each sample batch associated with the reported results. Alternatively, the laboratory may provide bench sheets and sample examination report forms for each field, matrix spike, IPR, OPR, and method blank sample associated with the reported results.

(g) If the Director determines that a previously collected data set submitted for grandfathering was generated during

source water conditions that were not normal for the system, such as a drought, the Director may disapprove the data. Alternatively, the Director may approve the previously collected data if the system reports additional source water monitoring data, as determined by the Director, to ensure that the data set used under R309-215-15(11) represents average source water conditions for the system.

(h) If a system submits previously collected data that fully meet the number of samples required for initial source water monitoring under R309-215-15(2)(a) and some of the data are rejected due to not meeting the requirements of this section, systems must conduct additional monitoring to replace rejected data on a schedule the Director approves. Systems are not required to begin this additional monitoring until two months after notification that data have been rejected and additional monitoring is necessary.

(9) Disinfection Profiling and Benchmarking Requirements - Requirements when making a significant change in disinfection practice.

(a) Following the completion of initial source water monitoring under R309-215-15(2)(a), a system that plans to make a significant change to its disinfection practice, as defined in paragraph (b) of this section, must develop disinfection profiles and calculate disinfection benchmarks for *Giardia lamblia* and viruses as described in R309-215-15(10). Prior to changing the disinfection practice, the system must notify the Director and must include in this notice the information in paragraphs (a)(i) through (iii) of this section.

(i) A completed disinfection profile and disinfection benchmark for *Giardia lamblia* and viruses as described in R309-215-15(10).

(ii) A description of the proposed change in disinfection practice.

(iii) An analysis of how the proposed change will affect the current level of disinfection.

(b) Significant changes to disinfection practice are defined as follows:

- (i) Changes to the point of disinfection;
- (ii) Changes to the disinfectant(s) used in the treatment plant;
- (iii) Changes to the disinfection process; or
- (iv) Any other modification identified by the Director as a significant change to disinfection practice.

(10) Developing the disinfection profile and benchmark.

(a) Systems required to develop disinfection profiles under R309-215-15(9) must follow the requirements of this section. Systems must monitor at least weekly for a period of 12 consecutive months to determine the total log inactivation for *Giardia lamblia* and viruses. If systems monitor more frequently, the monitoring frequency must be evenly spaced. Systems that operate for fewer than 12 months per year must monitor weekly during the period of operation. Systems must determine log inactivation for *Giardia lamblia* through the entire plant, based on CT_{99.9} values in Tables 1.1 through 1.6, 2.1 and 3.1 of Section 141.74(b) in the code of Federal Regulations as applicable (available from the Division). Systems must determine log inactivation for viruses through the entire treatment plant based on a protocol approved by the Director.

(b) Systems with a single point of disinfectant application prior to the entrance to the distribution system must conduct the monitoring in paragraphs (b)(i) through (iv) of this section. Systems with more than one point of disinfectant application must conduct the monitoring in paragraphs (b)(i) through (iv) of this section for each disinfection segment. Systems must monitor the parameters necessary to determine the total inactivation ratio, using analytical methods in R309-200-4(3) and (4).

(i) For systems using a disinfectant other than UV, the temperature of the disinfected water must be measured at each residual disinfectant concentration sampling point during peak hourly flow or at an alternative location approved by the Director.

(ii) For systems using chlorine, the pH of the disinfected water must be measured at each chlorine residual disinfectant concentration sampling point during peak hourly flow or at an alternative location approved by the Director.

(iii) The disinfectant contact time(s) (t) must be determined during peak hourly flow.

(iv) The residual disinfectant concentration(s) (C) of the water before or at the first customer and prior to each additional point of disinfectant application must be measured during peak hourly flow.

(c) In lieu of conducting new monitoring under paragraph (b) of this section, systems may elect to meet the requirements of paragraphs (c)(i) or (ii) of this section.

(i) Systems that have at least one year of existing data that are substantially equivalent to data collected under the provisions of paragraph (b) of this section may use these data to develop disinfection profiles as specified in this section if the system has neither made a significant change to its treatment practice nor changed sources since the data were collected. Systems may develop disinfection profiles using up to three years of existing data.

(ii) Systems may use disinfection profile(s) developed under R309-215-14 in lieu of developing a new profile if the system has neither made a significant change to its treatment practice nor changed sources since the profile was developed. Systems that have not developed a virus profile under R309-251-14 must develop a virus profile using the same monitoring data on which the *Giardia lamblia* profile is based.

(d) Systems must calculate the total inactivation ratio for *Giardia lamblia* as specified in paragraphs (d)(i) through (iii) of this section.

(i) Systems using only one point of disinfectant application may determine the total inactivation ratio for the disinfection segment based on either of the methods in paragraph (d)(1)(i) or (ii) of this section.

(A) Determine one inactivation ratio ($CT_{calc}/CT_{99.9}$) before or at the first customer during peak hourly flow.

(B) Determine successive $CT_{calc}/CT_{99.9}$ values, representing sequential inactivation ratios, between the point of disinfectant application and a point before or at the first customer during peak hourly flow. The system must calculate the total inactivation ratio by determining ($CT_{calc}/CT_{99.9}$) for each sequence and then adding the ($CT_{calc}/CT_{99.9}$) values together to determine the sum of ($CT_{calc}/CT_{99.9}$).

(ii) Systems using more than one point of disinfectant application before the first customer must determine the CT value of each disinfection segment immediately prior to the next point of disinfectant application, or for the final segment, before or at the first customer, during peak hourly flow. The ($CT_{calc}/CT_{99.9}$) value of each segment and the sum of ($CT_{calc}/CT_{99.9}$) must be calculated using the method in paragraph (d)(i)(B) of this section.

(iii) The system must determine the total logs of inactivation by multiplying the value calculated in paragraph (d)(i) or (d)(ii) of this section by 3.0.

(iv) Systems must calculate the log of inactivation for viruses using a protocol approved by the Director.

(e) Systems must use the procedures specified in paragraphs (e)(i) and (ii) of this section to calculate a disinfection benchmark.

(i) For each year of profiling data collected and calculated under paragraphs (a) through (d) of this section, systems must determine the lowest mean monthly level of both *Giardia lamblia* and virus inactivation. Systems must

determine the mean *Giardia lamblia* and virus inactivation for each calendar month for each year of profiling data by dividing the sum of daily or weekly *Giardia lamblia* and virus log inactivation by the number of values calculated for that month.

(ii) The disinfection benchmark is the lowest monthly mean value (for systems with one year of profiling data) or the mean of the lowest monthly mean values (for systems with more than one year of profiling data) of *Giardia lamblia* and virus log inactivation in each year of profiling data.

(11) Treatment Technique Requirements - Bin classification for filtered systems.

(a) Following completion of the initial round of source water monitoring required under R309-215-15(2)(a), filtered systems must calculate an initial *Cryptosporidium* bin concentration for each plant for which monitoring was required. Calculation of the bin concentration must use the *Cryptosporidium* results reported under R309-215-15(2)(a) and must follow the procedures in paragraphs (b)(i) through (v) of this section.

(b)(i) For systems that collect a total of at least 48 samples, the bin concentration is equal to the arithmetic mean of all sample concentrations.

(ii) For systems that collect a total of at least 24 samples, but not more than 47 samples, the bin concentration is equal to the highest arithmetic mean of all sample concentrations in any 12 consecutive months during which *Cryptosporidium* samples were collected.

(iii) For systems that serve fewer than 10,000 people and monitor for *Cryptosporidium* for only one year (i.e., collect 24 samples in 12 months), the bin concentration is equal to the arithmetic mean of all sample concentrations.

(iv) For systems with plants operating only part of the year that monitor fewer than 12 months per year under R309-215-15(2)(e), the bin concentration is equal to the highest arithmetic mean of all sample concentrations during any year of *Cryptosporidium* monitoring.

(v) If the monthly *Cryptosporidium* sampling frequency varies, systems must first calculate a monthly average for each month of monitoring. Systems must then use these monthly average concentrations, rather than individual sample concentrations, in the applicable calculation for bin classification in paragraphs (b)(i) through (iv) of this section.

(c) Filtered systems must determine their initial bin classification from the following and using the *Cryptosporidium* bin concentration calculated under paragraphs (a) and (b) of this section:

(i) Systems that are required to monitor for *Cryptosporidium* under R309-215-15(2):

(A) with a *cryptosporidium* concentration of less than 0.075 oocyst/L, the bin classification is Bin 1.

(B) with a *cryptosporidium* concentration of 0.075 oocysts/L to less than 1.0 oocysts/L, the bin classification is Bin 2.

(C) with a *cryptosporidium* concentration of 1.0 oocysts/L to less than 3.0 oocysts/L, the bin classification is Bin 3.

(D) with a *cryptosporidium* concentration of equal to or greater than 3.0 oocysts/L, the bin classification is Bin 4.

(ii) Systems serving fewer than 10,000 people and not required to monitor for *Cryptosporidium* under R309-215-15(2)(a)(iii), the concentration of *cryptosporidium* is not applicable and their bin classification is Bin 1.

(iii) Based on calculations in paragraph (a) or (d) of this section, as applicable.

(d) Following completion of the second round of source water monitoring required under R309-215-15(2)(b), filtered systems must recalculate their *Cryptosporidium* bin concentration using the *Cryptosporidium* results reported

under R309-215-15(2)(b) and following the procedures in paragraphs (b)(i) through (iv) of this section. Systems must then redetermine their bin classification using this bin concentration and the table in paragraph (c) of this section.

(e)(i) Filtered systems must report their initial bin classification under paragraph (c) of this section to the Director for approval no later than 6 months after the system is required to complete initial source water monitoring based on the schedule in R309-215-15(2)(c).

(ii) Systems must report their bin classification under paragraph (d) of this section to the Director for approval no later than 6 months after the system is required to complete the second round of source water monitoring based on the schedule in R309-215-15(2)(c).

(iii) The bin classification report to the Director must include a summary of source water monitoring data and the calculation procedure used to determine bin classification.

(f) Failure to comply with the conditions of paragraph (e) of this section is a violation of the treatment technique requirement.

(12) Filtered system additional Cryptosporidium treatment requirements.

(a) Filtered systems must provide the level of additional treatment for Cryptosporidium specified in this paragraph based on their bin classification as determined under R309-215-15(11) and according to the schedule in R309-215-15(13). The filtration treatment used by the system in this paragraph must be utilized in full compliance with the requirements of R309-200-5(5), R309-200-7, R309-215-8 and 9.

(i) If the system bin classification is Bin 1 and the system uses:

(A) Conventional filtration treatment including softening there is no additional cryptosporidium treatment required.

(B) Direct filtration there is no additional cryptosporidium treatment required.

(C) Slow sand or diatomaceous earth filtration there is no additional cryptosporidium treatment required.

(D) Alternative filtration technologies there is no additional cryptosporidium treatment required.

(ii) If the system bin classification is Bin 2 and the system uses:

(A) Conventional filtration treatment including softening there is an additional 1-log cryptosporidium treatment required.

(B) Direct filtration there is an additional 1.5-log cryptosporidium treatment required.

(C) Slow sand or diatomaceous earth filtration there is an additional 1-log cryptosporidium treatment required.

(D) Alternative filtration technologies there is an additional cryptosporidium treatment required as determined by the Director such that the total Cryptosporidium removal an inactivation is at least 4.0-log.

(iii) If the system bin classification is Bin 3 and the system uses:

(A) Conventional filtration treatment including softening there is an additional 2-log cryptosporidium treatment required.

(B) Direct filtration there is an additional 2.5-log cryptosporidium treatment required.

(C) Slow sand or diatomaceous earth filtration there is an additional 2-log cryptosporidium treatment required.

(D) Alternative filtration technologies there is an additional cryptosporidium treatment required as determined by the Director such that the total Cryptosporidium removal an inactivation is at least 5.0-log.

(iv) If the system bin classification is Bin 4 and the system uses:

(A) Conventional filtration treatment including softening there is an additional 2.5-log cryptosporidium treatment required.

(B) Direct filtration there is an additional 3-log cryptosporidium treatment required.

(C) Slow sand or diatomaceous earth filtration there is an additional 2.5-log cryptosporidium treatment required.

(D) Alternative filtration technologies there is an additional cryptosporidium treatment required as determined by the Director such that the total Cryptosporidium removal an inactivation is at least 5.5-log.

(b)(i) Filtered systems must use one or more of the treatment and management options listed in R309-215-15(14), termed the microbial toolbox, to comply with the additional Cryptosporidium treatment required in paragraph (a) of this section.

(ii) Systems classified in Bin 3 and Bin 4 must achieve at least 1-log of the additional Cryptosporidium treatment required under paragraph (a) of this section using either one or a combination of the following: bag filters, bank filtration, cartridge filters, chlorine dioxide, membranes, ozone, or UV, as described in R309-215-15(15) through R309-215-15(19).

(c) Failure by a system in any month to achieve treatment credit by meeting criteria in R309-215-15(15) through R309-215-15(19) for microbial toolbox options that is at least equal to the level of treatment required in paragraph (a) of this section is a violation of the treatment technique requirement.

(d) If the Director determines during a sanitary survey or an equivalent source water assessment that after a system completed the monitoring conducted under R309-215-15(2)(a) or R309-215-15(2)(b), significant changes occurred in the system's watershed that could lead to increased contamination of the source water by Cryptosporidium, the system must take actions specified by the Director to address the contamination. These actions may include additional source water monitoring and/or implementing microbial toolbox options listed in R309-215-15(14).

(13) Schedule for compliance with Cryptosporidium treatment requirements.

(a) Following initial bin classification under R309-215-15(11)(c), filtered systems must provide the level of treatment for Cryptosporidium required under R309-215-15(12) according to the schedule in paragraph (c) of this section.

(b) Cryptosporidium treatment compliance dates.

(i) Systems that serve at least 100,000 people must comply with Cryptosporidium treatment requirements no later than April 1, 2012.

(ii) Systems that serve from 50,000 to 99,999 people must comply with Cryptosporidium treatment requirements no later than October 1, 2012.

(iii) Systems that serve from 10,000 to 49,999 people must comply with Cryptosporidium treatment requirements no later than October 1, 2013.

(iv) Systems that serve less than 10,000 people must comply with Cryptosporidium treatment requirements no later than October 1, 2014.

(v) The Director may allow up to an additional two years for complying with the treatment requirement for systems making capital improvements.

(c) If the bin classification for a filtered system changes following the second round of source water monitoring, as determined under R309-215-15(11)(d), the system must provide the level of treatment for Cryptosporidium required under R309-215-15(12) on a schedule the Director approves.

(14) Microbial toolbox options for meeting Cryptosporidium treatment requirements.

(a) Systems receive the treatment credits listed in the table in paragraph (b) of this section by meeting the

conditions for microbial toolbox options described in R309-215-15(15) through R309-215-15(19). Systems apply these treatment credits to meet the treatment requirements in R309-215-15(12).

(b) The following sub-section summarizes options in the microbial toolbox and the Cryptosporidium treatment credit with design and implementation criteria.

(i) Source Protection and Management Toolbox Options:

(A) Watershed control program: 0.5-log credit for Director-approved program comprising required elements, annual program status report to Director, and regular watershed survey. Specific criteria are in R309-215-15(15) (a).

(B) Alternative source/intake management: No prescribed credit. Systems may conduct simultaneous monitoring for treatment bin classification at alternative intake locations or under alternative intake management strategies. Specific criteria are in R309-215-15(15) (b).

(ii) Pre Filtration Toolbox Options:

(A) Presedimentation basin with coagulation: 0.5-log credit during any month that presedimentation basins achieve a monthly mean reduction of 0.5-log or greater in turbidity or alternative Director-approved performance criteria. To be eligible, basins must be operated continuously with coagulant addition and all plant flow must pass through basins. Specific criteria are in R309-215-15(16) (a).

(B) Two-stage lime softening: 0.5-log credit for two-stage softening where chemical addition and hardness precipitation occur in both stages. All plant flow must pass through both stages. Single-stage softening is credited as equivalent to conventional treatment. Specific criteria are in R309-215-15(16) (b).

(C) Bank filtration: 0.5-log credit for 25-foot setback; 1.0-log credit for 50-foot setback; aquifer must be unconsolidated sand containing at least 10 percent fines; average turbidity in wells must be less than 1 NTU. Systems using wells followed by filtration when conducting source water monitoring must sample the well to determine bin classification and are not eligible for additional credit. Specific criteria are in R309-215-15(16) (c).

(iii) Treatment Performance Toolbox Options:

(A) Combined filter performance: 0.5-log credit for combined filter effluent turbidity less than or equal to 0.15 NTU in at least 95 percent of measurements each month. Specific criteria are in R309-215-15(17) (a).

(B) Individual filter performance: 0.5-log credit (in addition to 0.5-log combined filter performance credit) if individual filter effluent turbidity is less than or equal to 0.15 NTU in at least 95 percent of samples each month in each filter and is never greater than 0.3 NTU in two consecutive measurements in any filter. Specific criteria are in R309-215-15(17) (b).

(C) Demonstration of performance: Credit awarded to unit process or treatment train based on a demonstration to the Director with a Director-approved protocol. Specific criteria are in R309-215-15(17) (c).

(iv) Additional Filtration Toolbox Options:

(A) Bag or cartridge filters (individual filters): Up to 2-log credit based on the removal efficiency demonstrated during challenge testing with a 1.0-log factor of safety. Specific criteria are in R309-215-15(18) (a).

(B) Bag or cartridge filters (in series): Up to 2.5-log credit based on the removal efficiency demonstrated during challenge testing with a 0.5-log factor of safety. Specific criteria are in R309-215-15(18) (a).

(C) Membrane filtration: Log credit equivalent to removal efficiency demonstrated in challenge test for device if supported by direct integrity testing. Specific criteria are in

R309-215-15(18) (b).

(D) Second stage filtration: 0.5-log credit for second separate granular media filtration stage if treatment train includes coagulation prior to first filter. Specific criteria are in R309-215-15(18) (c).

(E) Slow sand filters: 2.5-log credit as a secondary filtration step; 3.0-log credit as a primary filtration process. No prior chlorination for either option. Specific criteria are in R309-215-15(18) (d).

(v) Inactivation Toolbox Options:

(A) Chlorine dioxide: Log credit based on measured CT in relation to CT table. Specific criteria in R309-215-15(19) (b).

(B) Ozone: Log credit based on measured CT in relation to CT table. Specific criteria in R309-215-15(19) (b).

(C) UV: Log credit based on validated UV dose in relation to UV dose table; reactor validation testing required to establish UV dose and associated operating conditions. Specific criteria in R309-215-15(19) (d).

(15) Source toolbox components.

(a) Watershed control program. Systems receive 0.5-log Cryptosporidium treatment credit for implementing a watershed control program that meets the requirements of this section.

(i) Systems that intend to apply for the watershed control program credit must notify the Director of this intent no later than two years prior to the treatment compliance date applicable to the system in R309-215-15(13).

(ii) Systems must submit to the Director a proposed watershed control plan no later than one year before the applicable treatment compliance date in R309-215-15(13). The Director must approve the watershed control plan for the system to receive watershed control program treatment credit. The watershed control plan must include the elements in paragraphs (a)(ii)(A) through (D) of this section.

(A) Identification of an "area of influence" outside of which the likelihood of Cryptosporidium or fecal contamination affecting the treatment plant intake is not significant. This is the area to be evaluated in future watershed surveys under paragraph (a)(v)(B) of this section.

(B) Identification of both potential and actual sources of Cryptosporidium contamination and an assessment of the relative impact of these sources on the system's source water quality.

(C) An analysis of the effectiveness and feasibility of control measures that could reduce Cryptosporidium loading from sources of contamination to the system's source water.

(D) A statement of goals and specific actions the system will undertake to reduce source water Cryptosporidium levels. The plan must explain how the actions are expected to contribute to specific goals, identify watershed partners and their roles, identify resource requirements and commitments, and include a schedule for plan implementation with deadlines for completing specific actions identified in the plan.

(iii) Systems with existing watershed control programs (i.e., programs in place on January 5, 2006) are eligible to seek this credit. Their watershed control plans must meet the criteria in paragraph (a)(ii) of this section and must specify ongoing and future actions that will reduce source water Cryptosporidium levels.

(iv) If the Director does not respond to a system regarding approval of a watershed control plan submitted under this section and the system meets the other requirements of this section, the watershed control program will be considered approved and 0.5 log Cryptosporidium treatment credit will be awarded unless and until the Director subsequently withdraws such approval.

(v) Systems must complete the actions in paragraphs (a)(v)(A) through (C) of this section to maintain the 0.5-log credit.

(A) Submit an annual watershed control program status report to the Director. The annual watershed control program status report must describe the system's implementation of the approved plan and assess the adequacy of the plan to meet its goals. It must explain how the system is addressing any shortcomings in plan implementation, including those previously identified by the Director or as the result of the watershed survey conducted under paragraph (a)(v)(B) of this section. It must also describe any significant changes that have occurred in the watershed since the last watershed sanitary survey. If a system determines during implementation that making a significant change to its approved watershed control program is necessary, the system must notify the Director prior to making any such changes. If any change is likely to reduce the level of source water protection, the system must also list in its notification the actions the system will take to mitigate this effect.

(B) Undergo a watershed sanitary survey every three years for community water systems and every five years for non-community water systems and submit the survey report to the Director. The survey must be conducted according to State guidelines and by persons the Director approves.

(I) The watershed sanitary survey must meet the following criteria: encompass the region identified in the Director-approved watershed control plan as the area of influence; assess the implementation of actions to reduce source water *Cryptosporidium* levels; and identify any significant new sources of *Cryptosporidium*.

(II) If the Director determines that significant changes may have occurred in the watershed since the previous watershed sanitary survey, systems must undergo another watershed sanitary survey by a date the Director requires, which may be earlier than the regular date in paragraph (a)(v)(B) of this section.

(C) The system must make the watershed control plan, annual status reports, and watershed sanitary survey reports available to the public upon request. These documents must be in a plain language style and include criteria by which to evaluate the success of the program in achieving plan goals. The Director may approve systems to withhold from the public portions of the annual status report, watershed control plan, and watershed sanitary survey based on water supply security considerations.

(vi) If the Director determines that a system is not carrying out the approved watershed control plan, the Director may withdraw the watershed control program treatment credit.

(b) Alternative source. (i) A system may conduct source water monitoring that reflects a different intake location (either in the same source or for an alternate source) or a different procedure for the timing or level of withdrawal from the source (alternative source monitoring). If the Director approves, a system may determine its bin classification under R309-215-15(11) based on the alternative source monitoring results.

(ii) If systems conduct alternative source monitoring under paragraph (b)(i) of this section, systems must also monitor their current plant intake concurrently as described in R309-215-15(2).

(iii) Alternative source monitoring under paragraph (b)(i) of this section must meet the requirements for source monitoring to determine bin classification, as described in R309-215-15(2) through R309-215-15(7). Systems must report the alternative source monitoring results to the Director, along with supporting information documenting the operating conditions under which the samples were collected.

(iv) If a system determines its bin classification under

R309-215-15(11) using alternative source monitoring results that reflect a different intake location or a different procedure for managing the timing or level of withdrawal from the source, the system must relocate the intake or permanently adopt the withdrawal procedure, as applicable, no later than the applicable treatment compliance date in R309-215-15(13).

(16) Pre-filtration treatment toolbox components.

(a) Presedimentation. Systems receive 0.5-log *Cryptosporidium* treatment credit for a presedimentation basin during any month the process meets the criteria in this paragraph.

(i) The presedimentation basin must be in continuous operation and must treat the entire plant flow taken from a surface water or GWUDI source.

(ii) The system must continuously add a coagulant to the presedimentation basin.

(iii) The presedimentation basin must achieve the performance criteria in paragraph (iii)(A) or (B) of this section.

(A) Demonstrates at least 0.5-log mean reduction of influent turbidity. This reduction must be determined using daily turbidity measurements in the presedimentation process influent and effluent and must be calculated as follows: $\log_{10}(\text{monthly mean of daily influent turbidity}) - \log_{10}(\text{monthly mean of daily effluent turbidity})$.

(B) Complies with Director-approved performance criteria that demonstrate at least 0.5-log mean removal of micron-sized particulate material through the presedimentation process.

(b) Two-stage lime softening. Systems receive an additional 0.5-log *Cryptosporidium* treatment credit for a two-stage lime softening plant if chemical addition and hardness precipitation occur in two separate and sequential softening stages prior to filtration. Both softening stages must treat the entire plant flow taken from a surface water or GWUDI source.

(c) Bank filtration. Systems receive *Cryptosporidium* treatment credit for bank filtration that serves as pretreatment to a filtration plant by meeting the criteria in this paragraph. Systems using bank filtration when they begin source water monitoring under R309-215-15(2)(a) must collect samples as described in R309-215-15(4)(d) and are not eligible for this credit.

(i) Wells with a ground water flow path of at least 25 feet receive 0.5-log treatment credit; wells with a ground water flow path of at least 50 feet receive 1.0-log treatment credit. The ground water flow path must be determined as specified in paragraph (c)(iv) of this section.

(ii) Only wells in granular aquifers are eligible for treatment credit. Granular aquifers are those comprised of sand, clay, silt, rock fragments, pebbles or larger particles, and minor cement. A system must characterize the aquifer at the well site to determine aquifer properties. Systems must extract a core from the aquifer and demonstrate that in at least 90 percent of the core length, grains less than 1.0 mm in diameter constitute at least 10 percent of the core material.

(iii) Only horizontal and vertical wells are eligible for treatment credit.

(iv) For vertical wells, the ground water flow path is the measured distance from the edge of the surface water body under high flow conditions (determined by the 100 year floodplain elevation boundary or by the floodway, as defined in Federal Emergency Management Agency flood hazard maps) to the well screen. For horizontal wells, the ground water flow path is the measured distance from the bed of the river under normal flow conditions to the closest horizontal well lateral screen.

(v) Systems must monitor each wellhead for turbidity at

least once every four hours while the bank filtration process is in operation. If monthly average turbidity levels, based on daily maximum values in the well, exceed 1 NTU, the system must report this result to the Director and conduct an assessment within 30 days to determine the cause of the high turbidity levels in the well. If the Director determines that microbial removal has been compromised, the Director may revoke treatment credit until the system implements corrective actions approved by the Director to remediate the problem.

(vi) Springs and infiltration galleries are not eligible for treatment credit under this section, but are eligible for credit under R309-215-15(17)(c).

(vii) Bank filtration demonstration of performance. The Director may approve Cryptosporidium treatment credit for bank filtration based on a demonstration of performance study that meets the criteria in this paragraph. This treatment credit may be greater than 1.0-log and may be awarded to bank filtration that does not meet the criteria in paragraphs (c)(i)-(v) of this section.

(A) The study must follow a Director-approved protocol and must involve the collection of data on the removal of Cryptosporidium or a surrogate for Cryptosporidium and related hydrogeologic and water quality parameters during the full range of operating conditions.

(B) The study must include sampling both from the production well(s) and from monitoring wells that are screened and located along the shortest flow path between the surface water source and the production well(s).

(17) Treatment performance toolbox components.

(a) Combined filter performance. Systems using conventional filtration treatment or direct filtration treatment receive an additional 0.5-log Cryptosporidium treatment credit during any month the system meets the criteria in this paragraph. Combined filter effluent (CFE) turbidity must be less than or equal to 0.15 NTU in at least 95 percent of the measurements. Turbidity must be measured as described in R309-200-4(3) and (4).

(b) Individual filter performance. Systems using conventional filtration treatment or direct filtration treatment receive 0.5-log Cryptosporidium treatment credit, which can be in addition to the 0.5-log credit under paragraph (a) of this section, during any month the system meets the criteria in this paragraph. Compliance with these criteria must be based on individual filter turbidity monitoring as described in R309-215-9(4) or (5), as applicable.

(i) The filtered water turbidity for each individual filter must be less than or equal to 0.15 NTU in at least 95 percent of the measurements recorded each month.

(ii) No individual filter may have a measured turbidity greater than 0.3 NTU in two consecutive measurements taken 15 minutes apart.

(iii) Any system that has received treatment credit for individual filter performance and fails to meet the requirements of paragraph (b)(i) or (ii) of this section during any month does not receive a treatment technique violation under R309-215-15(12)(c) if the Director determines the following:

(A) The failure was due to unusual and short-term circumstances that could not reasonably be prevented through optimizing treatment plant design, operation, and maintenance.

(B) The system has experienced no more than two such failures in any calendar year.

(c) Demonstration of performance. The Director may approve Cryptosporidium treatment credit for drinking water treatment processes based on a demonstration of performance study that meets the criteria in this paragraph. This treatment credit may be greater than or less than the prescribed treatment credits in R309-215-15(12) or R309-215-15(16)

through R309-215-15(19) and may be awarded to treatment processes that do not meet the criteria for the prescribed credits.

(i) Systems cannot receive the prescribed treatment credit for any toolbox box option in R309-215-15(16) through R309-215-15(19) if that toolbox option is included in a demonstration of performance study for which treatment credit is awarded under this paragraph.

(ii) The demonstration of performance study must follow a Director-approved protocol and must demonstrate the level of Cryptosporidium reduction the treatment process will achieve under the full range of expected operating conditions for the system.

(iii) Approval by the Director must be in writing and may include monitoring and treatment performance criteria that the system must demonstrate and report on an ongoing basis to remain eligible for the treatment credit. The Director may designate such criteria where necessary to verify that the conditions under which the demonstration of performance credit was approved are maintained during routine operation.

(18) Additional filtration toolbox components.

(a) Bag and cartridge filters. Systems receive Cryptosporidium treatment credit of up to 2.0-log for individual bag or cartridge filters and up to 2.5-log for bag or cartridge filters operated in series by meeting the criteria in paragraphs (a)(i) through (x) of this section. To be eligible for this credit, systems must report the results of challenge testing that meets the requirements of paragraphs (a)(ii) through (ix) of this section to the Director. The filters must treat the entire plant flow taken from a surface water source.

(i) The Cryptosporidium treatment credit awarded to bag or cartridge filters must be based on the removal efficiency demonstrated during challenge testing that is conducted according to the criteria in paragraphs (a)(ii) through (a)(ix) of this section. A factor of safety equal to 1-log for individual bag or cartridge filters and 0.5-log for bag or cartridge filters in series must be applied to challenge testing results to determine removal credit. Systems may use results from challenge testing conducted prior to January 5, 2006 if the prior testing was consistent with the criteria specified in paragraphs (a)(ii) through (ix) of this section.

(ii) Challenge testing must be performed on full-scale bag or cartridge filters, and the associated filter housing or pressure vessel, that are identical in material and construction to the filters and housings the system will use for removal of Cryptosporidium. Bag or cartridge filters must be challenge tested in the same configuration that the system will use, either as individual filters or as a series configuration of filters.

(iii) Challenge testing must be conducted using Cryptosporidium or a surrogate that is removed no more efficiently than Cryptosporidium. The microorganism or surrogate used during challenge testing is referred to as the challenge particulate. The concentration of the challenge particulate must be determined using a method capable of discreetly quantifying the specific microorganism or surrogate used in the test; gross measurements such as turbidity may not be used.

(iv) The maximum feed water concentration that can be used during a challenge test must be based on the detection limit of the challenge particulate in the filtrate (i.e., filtrate detection limit) and must be calculated using the following equation: Maximum Feed Concentration = $1 \times 10^4 \times (\text{Filtrate Detection Limit})$.

(v) Challenge testing must be conducted at the maximum design flow rate for the filter as specified by the manufacturer.

(vi) Each filter evaluated must be tested for a duration sufficient to reach 100 percent of the terminal pressure drop,

which establishes the maximum pressure drop under which the filter may be used to comply with the requirements of this subpart.

(vii) Removal efficiency of a filter must be determined from the results of the challenge test and expressed in terms of log removal values using the following equation: $LRV = \text{LOG}_{10}(C_f) - \text{LOG}_{10}(C_p)$ Where: LRV = log removal value demonstrated during challenge testing; C_f = the feed concentration measured during the challenge test; and C_p = the filtrate concentration measured during the challenge test. In applying this equation, the same units must be used for the feed and filtrate concentrations. If the challenge particulate is not detected in the filtrate, then the term C_p must be set equal to the detection limit.

(viii) Each filter tested must be challenged with the challenge particulate during three periods over the filtration cycle: within two hours of start-up of a new filter; when the pressure drop is between 45 and 55 percent of the terminal pressure drop; and at the end of the cycle after the pressure drop has reached 100 percent of the terminal pressure drop. An LRV must be calculated for each of these challenge periods for each filter tested. The LRV for the filter (LRV_{filter}) must be assigned the value of the minimum LRV observed during the three challenge periods for that filter.

(ix) If fewer than 20 filters are tested, the overall removal efficiency for the filter product line must be set equal to the lowest LRV_{filter} among the filters tested. If 20 or more filters are tested, the overall removal efficiency for the filter product line must be set equal to the 10th percentile of the set of LRV_{filter} values for the various filters tested. The percentile is defined by $(i/(n+1))$ where i is the rank of n individual data points ordered lowest to highest. If necessary, the 10th percentile may be calculated using linear interpolation.

(x) If a previously tested filter is modified in a manner that could change the removal efficiency of the filter product line, challenge testing to demonstrate the removal efficiency of the modified filter must be conducted and submitted to the Director.

(b) Membrane filtration.

(i) Systems receive Cryptosporidium treatment credit for membrane filtration that meets the criteria of this paragraph. Membrane cartridge filters that meet the definition of membrane filtration in R309-110 are eligible for this credit. The level of treatment credit a system receives is equal to the lower of the values determined under paragraph (b)(i)(A) and (B) of this section.

(A) The removal efficiency demonstrated during challenge testing conducted under the conditions in paragraph (b)(ii) of this section.

(B) The maximum removal efficiency that can be verified through direct integrity testing used with the membrane filtration process under the conditions in paragraph (b)(iii) of this section.

(ii) Challenge Testing. The membrane used by the system must undergo challenge testing to evaluate removal efficiency, and the system must report the results of challenge testing to the Director. Challenge testing must be conducted according to the criteria in paragraphs (b)(ii)(A) through (G) of this section. Systems may use data from challenge testing conducted prior to January 5, 2006 if the prior testing was consistent with the criteria in paragraphs (b)(ii)(A) through (G) of this section.

(A) Challenge testing must be conducted on either a full-scale membrane module, identical in material and construction to the membrane modules used in the system's treatment facility, or a smaller-scale membrane module, identical in material and similar in construction to the full-scale module. A module is defined as the smallest component of a membrane unit in which a specific membrane surface area

is housed in a device with a filtrate outlet structure.

(B) Challenge testing must be conducted using *Cryptosporidium* oocysts or a surrogate that is removed no more efficiently than *Cryptosporidium* oocysts. The organism or surrogate used during challenge testing is referred to as the challenge particulate. The concentration of the challenge particulate, in both the feed and filtrate water, must be determined using a method capable of discretely quantifying the specific challenge particulate used in the test; gross measurements such as turbidity may not be used.

(C) The maximum feed water concentration that can be used during a challenge test is based on the detection limit of the challenge particulate in the filtrate and must be determined according to the following equation: Maximum Feed Concentration = $3.16 \times 10^6 \times (\text{Filtrate Detection Limit})$.

(D) Challenge testing must be conducted under representative hydraulic conditions at the maximum design flux and maximum design process recovery specified by the manufacturer for the membrane module. Flux is defined as the throughput of a pressure driven membrane process expressed as flow per unit of membrane area. Recovery is defined as the volumetric percent of feed water that is converted to filtrate over the course of an operating cycle uninterrupted by events such as chemical cleaning or a solids removal process (i.e., backwashing).

(E) Removal efficiency of a membrane module must be calculated from the challenge test results and expressed as a log removal value according to the following equation: $LRV = \text{LOG}_{10}(C_f) - \text{LOG}_{10}(C_p)$ Where: LRV = log removal value demonstrated during the challenge test; C_f = the feed concentration measured during the challenge test; and C_p = the filtrate concentration measured during the challenge test. Equivalent units must be used for the feed and filtrate concentrations. If the challenge particulate is not detected in the filtrate, the term C_p is set equal to the detection limit for the purpose of calculating the LRV. An LRV must be calculated for each membrane module evaluated during the challenge test.

(F) The removal efficiency of a membrane filtration process demonstrated during challenge testing must be expressed as a log removal value ($LRV_{\text{C-Test}}$). If fewer than 20 modules are tested, then $LRV_{\text{C-Test}}$ is equal to the lowest of the representative LRVs among the modules tested. If 20 or more modules are tested, then $LRV_{\text{C-Test}}$ is equal to the 10th percentile of the representative LRVs among the modules tested. The percentile is defined by $(i/(n+1))$ where i is the rank of n individual data points ordered lowest to highest. If necessary, the 10th percentile may be calculated using linear interpolation.

(G) The challenge test must establish a quality control release value (QCRV) for a non-destructive performance test that demonstrates the *Cryptosporidium* removal capability of the membrane filtration module. This performance test must be applied to each production membrane module used by the system that was not directly challenge tested in order to verify *Cryptosporidium* removal capability. Production modules that do not meet the established QCRV are not eligible for the treatment credit demonstrated during the challenge test.

(H) If a previously tested membrane is modified in a manner that could change the removal efficiency of the membrane or the applicability of the non-destructive performance test and associated QCRV, additional challenge testing to demonstrate the removal efficiency of, and determine a new QCRV for, the modified membrane must be conducted and submitted to the Director.

(iii) Direct integrity testing. Systems must conduct direct integrity testing in a manner that demonstrates a removal efficiency equal to or greater than the removal credit awarded to the membrane filtration process and meets the

requirements described in paragraphs (b)(iii)(A) through (F) of this section. A direct integrity test is defined as a physical test applied to a membrane unit in order to identify and isolate integrity breaches (i.e., one or more leaks that could result in contamination of the filtrate).

(A) The direct integrity test must be independently applied to each membrane unit in service. A membrane unit is defined as a group of membrane modules that share common valving that allows the unit to be isolated from the rest of the system for the purpose of integrity testing or other maintenance.

(B) The direct integrity method must have a resolution of 3 micrometers or less, where resolution is defined as the size of the smallest integrity breach that contributes to a response from the direct integrity test.

(C) The direct integrity test must have a sensitivity sufficient to verify the log treatment credit awarded to the membrane filtration process by the Director, where sensitivity is defined as the maximum log removal value that can be reliably verified by a direct integrity test. Sensitivity must be determined using the approach in either paragraph (b)(iii)(C)(I) or (II) of this section as applicable to the type of direct integrity test the system uses.

(I) For direct integrity tests that use an applied pressure or vacuum, the direct integrity test sensitivity must be calculated according to the following equation: $LRV_{DIT} = \log_{10} (Q_p / (VCF \times Q_{breach}))$ Where: LRV_{DIT} = the sensitivity of the direct integrity test; Q_p = total design filtrate flow from the membrane unit; Q_{breach} = flow of water from an integrity breach associated with the smallest integrity test response that can be reliably measured, and VCF = volumetric concentration factor. The volumetric concentration factor is the ratio of the suspended solids concentration on the high pressure side of the membrane relative to that in the feed water.

(II) For direct integrity tests that use a particulate or molecular marker, the direct integrity test sensitivity must be calculated according to the following equation: $LRV_{DIT} = \log_{10}(C_f) - \log_{10}(C_p)$ Where: LRV_{DIT} = the sensitivity of the direct integrity test; C_f = the typical feed concentration of the marker used in the test; and C_p = the filtrate concentration of the marker from an integral membrane unit.

(D) Systems must establish a control limit within the sensitivity limits of the direct integrity test that is indicative of an integral membrane unit capable of meeting the removal credit awarded by the Director.

(E) If the result of a direct integrity test exceeds the control limit established under paragraph (b)(iii)(D) of this section, the system must remove the membrane unit from service. Systems must conduct a direct integrity test to verify any repairs, and may return the membrane unit to service only if the direct integrity test is within the established control limit.

(F) Systems must conduct direct integrity testing on each membrane unit at a frequency of not less than once each day that the membrane unit is in operation. The Director may approve less frequent testing, based on demonstrated process reliability, the use of multiple barriers effective for Cryptosporidium, or reliable process safeguards.

(iv) Indirect integrity monitoring. Systems must conduct continuous indirect integrity monitoring on each membrane unit according to the criteria in paragraphs (b)(iv)(A) through (E) of this section. Indirect integrity monitoring is defined as monitoring some aspect of filtrate water quality that is indicative of the removal of particulate matter. A system that implements continuous direct integrity testing of membrane units in accordance with the criteria in paragraphs (b)(iii)(A) through (E) of this section is not subject to the requirements for continuous indirect integrity

monitoring. Systems must submit a monthly report to the Director summarizing all continuous indirect integrity monitoring results triggering direct integrity testing and the corrective action that was taken in each case.

(A) Unless the Director approves an alternative parameter, continuous indirect integrity monitoring must include continuous filtrate turbidity monitoring.

(B) Continuous monitoring must be conducted at a frequency of no less than once every 15 minutes.

(C) Continuous monitoring must be separately conducted on each membrane unit.

(D) If indirect integrity monitoring includes turbidity and if the filtrate turbidity readings are above 0.15 NTU for a period greater than 15 minutes (i.e., two consecutive 15-minute readings above 0.15 NTU), direct integrity testing must immediately be performed on the associated membrane unit as specified in paragraphs (b)(iii)(A) through (E) of this section.

(E) If indirect integrity monitoring includes a Director-approved alternative parameter and if the alternative parameter exceeds a Director-approved control limit for a period greater than 15 minutes, direct integrity testing must immediately be performed on the associated membrane units as specified in paragraphs (b)(iii)(A) through (E) of this section.

(c) Second stage filtration. Systems receive 0.5-log Cryptosporidium treatment credit for a separate second stage of filtration that consists of sand, dual media, GAC, or other fine grain media following granular media filtration if the Director approves. To be eligible for this credit, the first stage of filtration must be preceded by a coagulation step and both filtration stages must treat the entire plant flow taken from a surface water or GWUDI source. A cap, such as GAC, on a single stage of filtration is not eligible for this credit. The Director must approve the treatment credit based on an assessment of the design characteristics of the filtration process.

(d) Slow sand filtration (as secondary filter). Systems are eligible to receive 2.5-log Cryptosporidium treatment credit for a slow sand filtration process that follows a separate stage of filtration if both filtration stages treat entire plant flow taken from a surface water or GWUDI source and no disinfectant residual is present in the influent water to the slow sand filtration process. The Director must approve the treatment credit based on an assessment of the design characteristics of the filtration process. This paragraph does not apply to treatment credit awarded to slow sand filtration used as a primary filtration process.

(19) Inactivation toolbox components.

(a) Calculation of CT values. (i) CT is the product of the disinfectant contact time (T, in minutes) and disinfectant concentration (C, in milligrams per liter). Systems with treatment credit for chlorine dioxide or ozone under paragraph (b) or (c) of this section must calculate CT at least once each day, with both C and T measured during peak hourly flow as specified in R309-200-4(3) and (4).

(ii) Systems with several disinfection segments in sequence may calculate CT for each segment, where a disinfection segment is defined as a treatment unit process with a measurable disinfectant residual level and a liquid volume. Under this approach, systems must add the Cryptosporidium CT values in each segment to determine the total CT for the treatment plant.

(b) CT values for chlorine dioxide and ozone. (i) Systems receive the Cryptosporidium treatment credit listed in this paragraph by meeting the corresponding chlorine dioxide CT value for the applicable water temperature, as described in paragraph (a) of this section.

(i) CT values ((MG)(MIN)/L) for Cryptosporidium

inactivation by Chlorine Dioxide listed by the log credit with inactivation listed by water temperature in degrees Celsius.

(A) 0.25 Log Credit:

- (I) less than or equal to 0.5 degrees: 159;
- (II) 1 degree: 153;
- (III) 2 degrees: 140;
- (IV) 3 degrees: 128;
- (V) 5 degrees: 107;
- (VI) 7 degrees: 90;
- (VII) 10 degrees: 69;
- (VIII) 15 degrees: 45;
- (IX) 20 degrees: 29;
- (X) 25 degrees: 19; and
- (XI) 30 degrees: 12.

(B) 0.5 Log Credit:

- (I) less than or equal to 0.5 degrees: 319;
- (II) 1 degree: 305;
- (III) 2 degrees: 279;
- (IV) 3 degrees: 256;
- (V) 5 degrees: 214;
- (VI) 7 degrees: 180;
- (VII) 10 degrees: 138;
- (VIII) 15 degrees: 89;
- (IX) 20 degrees: 58;
- (X) 25 degrees: 38; and
- (XI) 30 degrees: 24.

(C) 1.0 Log Credit:

- (I) less than or equal to 0.5 degrees: 637;
- (II) 1 degree: 610;
- (III) 2 degrees: 558;
- (IV) 3 degrees: 511;
- (V) 5 degrees: 429;
- (VI) 7 degrees: 360;
- (VII) 10 degrees: 277;
- (VIII) 15 degrees: 179;
- (IX) 20 degrees: 116;
- (X) 25 degrees: 75; and
- (XI) 30 degrees: 49.

(D) 1.5 Log Credit:

- (I) less than or equal to 0.5 degrees: 956;
- (II) 1 degree: 915;
- (III) 2 degrees: 838;
- (IV) 3 degrees: 767;
- (V) 5 degrees: 643;
- (VI) 7 degrees: 539;
- (VII) 10 degrees: 415;
- (VIII) 15 degrees: 268;
- (IX) 20 degrees: 174;
- (X) 25 degrees: 113; and
- (XI) 30 degrees: 73.

(E) 2.0 Log Credit:

- (I) less than or equal to 0.5 degrees: 1275;
- (II) 1 degree: 1220;
- (III) 2 degrees: 1117;
- (IV) 3 degrees: 1023;
- (V) 5 degrees: 858;
- (VI) 7 degrees: 719;
- (VII) 10 degrees: 553;
- (VIII) 15 degrees: 357;
- (IX) 20 degrees: 232;
- (X) 25 degrees: 150; and
- (XI) 30 degrees: 98.

(F) 2.5 Log Credit:

- (I) less than or equal to 0.5 degrees: 1594;
- (II) 1 degree: 1525;
- (III) 2 degrees: 1396;
- (IV) 3 degrees: 1278;
- (V) 5 degrees: 1072;
- (VI) 7 degrees: 899;

(VII) 10 degrees: 691;

(VIII) 15 degrees: 447;

(IX) 20 degrees: 289;

(X) 25 degrees: 188; and

(XI) 30 degrees: 122.

(G) 3.0 Log Credit:

(I) less than or equal to 0.5 degrees: 1912;

(II) 1 degree: 1830;

(III) 2 degrees: 1675;

(IV) 3 degrees: 1534;

(V) 5 degrees: 1286;

(VI) 7 degrees: 1079;

(VII) 10 degrees: 830;

(VIII) 15 degrees: 536;

(IX) 20 degrees: 347;

(X) 25 degrees: 226; and

(XI) 30 degrees: 147.

(F) Systems may use this equation to determine log credit between the indicated values above: $\text{Log credit} = (0.001506 \times (1.09116)^{\text{Temp}}) \times \text{CT}$.

(ii) Systems receive the Cryptosporidium treatment credit listed in this paragraph by meeting the corresponding ozone CT values for the applicable water temperature, as described in paragraph (a) of this section. CT values ((MG)(MIN)/L) for Cryptosporidium inactivation by Ozone listed by the log credit with inactivation listed by water temperature in degrees Celsius.

(A) 0.25 Log Credit:

- (I) less than or equal to 0.5 degrees: 6.0;
- (II) 1 degree: 5.8;
- (III) 2 degrees: 5.2;
- (IV) 3 degrees: 4.8;
- (V) 5 degrees: 4.0;
- (VI) 7 degrees: 3.3;
- (VII) 10 degrees: 2.5;
- (VIII) 15 degrees: 1.6;
- (IX) 20 degrees: 1.0;
- (X) 25 degrees: 0.6; and
- (XI) 30 degrees: 0.39.

(B) 0.5 Log Credit:

- (I) less than or equal to 0.5 degrees: 12;
- (II) 1 degree: 12;
- (III) 2 degrees: 10;
- (IV) 3 degrees: 9.5;
- (V) 5 degrees: 7.9;
- (VI) 7 degrees: 6.5;
- (VII) 10 degrees: 4.9;
- (VIII) 15 degrees: 3.1;
- (IX) 20 degrees: 2.0;
- (X) 25 degrees: 1.2; and
- (XI) 30 degrees: 0.78.

(C) 1.0 Log Credit:

- (I) less than or equal to 0.5 degrees: 24;
- (II) 1 degree: 23;
- (III) 2 degrees: 21;
- (IV) 3 degrees: 19;
- (V) 5 degrees: 16;
- (VI) 7 degrees: 13;
- (VII) 10 degrees: 9.9;
- (VIII) 15 degrees: 6.2;
- (IX) 20 degrees: 3.9;
- (X) 25 degrees: 2.5; and
- (XI) 30 degrees: 1.6.

(D) 1.5 Log Credit:

- (I) less than or equal to 0.5 degrees: 36;
- (II) 1 degree: 35;
- (III) 2 degrees: 31;
- (IV) 3 degrees: 29;
- (V) 5 degrees: 24;

- (VI) 7 degrees: 20;
 (VII) 10 degrees: 15;
 (VIII) 15 degrees: 9.3;
 (IX) 20 degrees: 5.9;
 (X) 25 degrees: 3.7; and
 (XI) 30 degrees: 2.4.
 (E) 2.0 Log Credit:

- (I) less than or equal to 0.5 degrees: 48;
 (II) 1 degree: 46;
 (III) 2 degrees: 42;
 (IV) 3 degrees: 38;
 (V) 5 degrees: 32;
 (VI) 7 degrees: 26;
 (VII) 10 degrees: 20;
 (VIII) 15 degrees: 12;
 (IX) 20 degrees: 7.8;
 (X) 25 degrees: 4.9; and
 (XI) 30 degrees: 3.1.

(F) 2.5 Log Credit:

- (I) less than or equal to 0.5 degrees: 60;
 (II) 1 degree: 58;
 (III) 2 degrees: 52;
 (IV) 3 degrees: 48;
 (V) 5 degrees: 40;
 (VI) 7 degrees: 33;
 (VII) 10 degrees: 25;
 (VIII) 15 degrees: 16;
 (IX) 20 degrees: 9.8;
 (X) 25 degrees: 6.2; and
 (XI) 30 degrees: 3.9.

(G) 3.0 Log Credit:

- (I) less than or equal to 0.5 degrees: 72;
 (II) 1 degree: 69;
 (III) 2 degrees: 63;
 (IV) 3 degrees: 57;
 (V) 5 degrees: 47;
 (VI) 7 degrees: 39;
 (VII) 10 degrees: 30;
 (VIII) 15 degrees: 19;
 (IX) 20 degrees: 12;
 (X) 25 degrees: 7.4; and
 (XI) 30 degrees: 4.7.

(F) Systems may use this equation to determine log credit between the indicated values: $\text{Log credit} = (0.0397 \times (1.09757)^{\text{Temp}}) \times \text{CT}$.

(c) Site-specific study. The Director may approve alternative chlorine dioxide or ozone CT values to those listed in paragraph (b) above on a site-specific basis. The Director must base this approval on a site-specific study a system conducts that follows a protocol approved by the Director.

(d) Ultraviolet light. Systems receive *Cryptosporidium*, *Giardia lamblia*, and virus treatment credits for ultraviolet (UV) light reactors by achieving the corresponding UV dose values shown in paragraph (d)(i) of this section. Systems must validate and monitor UV reactors as described in paragraph (d)(ii) and (iii) of this section to demonstrate that they are achieving a particular UV dose value for treatment credit.

(i) UV dose table. The treatment credits listed in Table 215-5 are for UV light at a wavelength of 254 nm as produced by a low pressure mercury vapor lamp. To receive treatment credit for other lamp types, systems must demonstrate an equivalent germicidal dose through reactor validation testing, as described in paragraph (d)(ii). The UV dose values in Table 215-5 are applicable only to post-filter applications of UV in filtered systems.

Log credit	<i>Cryptosporidium</i> UV dose (mJ/cm ²)	<i>Giardia lamblia</i> UV dose (mJ/cm ²)	Virus UV dose (mJ/cm ²)
0.5	1.6	1.5	39
1.0	2.5	2.1	58
1.5	3.9	3.0	79
2.0	5.8	5.2	100
2.5	8.5	7.7	121
3.0	12	11	143
3.5	15	15	163
4.0	22	22	186

(ii) Reactor validation testing. Systems must use UV reactors that have undergone validation testing to determine the operating conditions under which the reactor delivers the UV dose required in paragraph (d)(i) of this section (i.e., validated operating conditions). These operating conditions must include flow rate, UV intensity as measured by a UV sensor, and UV lamp status.

(A) When determining validated operating conditions, systems must account for the following factors: UV absorbance of the water; lamp fouling and aging; measurement uncertainty of on-line sensors; UV dose distributions arising from the velocity profiles through the reactor; failure of UV lamps or other critical system components; and inlet and outlet piping or channel configurations of the UV reactor.

(B) Validation testing must include the following: Full scale testing of a reactor that conforms uniformly to the UV reactors used by the system and inactivation of a test microorganism whose dose response characteristics have been quantified with a low pressure mercury vapor lamp.

(C) The Director may approve an alternative approach to validation testing.

(iii) Reactor monitoring.

(A) Systems must monitor their UV reactors to determine if the reactors are operating within validated conditions, as determined under paragraph (d)(ii) of this section. This monitoring must include UV intensity as measured by a UV sensor, flow rate, lamp status, and other parameters the Director designates based on UV reactor operation. Systems must verify the calibration of UV sensors and must recalibrate sensors in accordance with a protocol the Director approves.

(B) To receive treatment credit for UV light, systems must treat at least 95 percent of the water delivered to the public during each month by UV reactors operating within validated conditions for the required UV dose, as described in paragraphs (d)(i) and (ii) of this section. Systems must demonstrate compliance with this condition by the monitoring required under paragraph (d)(iii)(A) of this section.

(20) Reporting requirements.

(a) Systems must report sampling schedules under R309-215-15(3) and source water monitoring results under R309-215-15(7) unless they notify the Director that they will not conduct source water monitoring due to meeting the criteria of R309-215-15(2)(d).

(b) Filtered systems must report their *Cryptosporidium* bin classification as described in R309-215-15(11).

(c) Systems must report disinfection profiles and benchmarks to the Director as described in R309-215-15(9) through R309-215-15(10) prior to making a significant change in disinfection practice.

(d) Systems must report to the Director in accordance with the following information on the following schedule for any microbial toolbox options used to comply with treatment requirements under R309-215-15(12). Alternatively, the Director may approve a system to certify operation within required parameters for treatment credit rather than reporting monthly operational data for toolbox options.

(i) Watershed control program (WCP).

(A) Notice of intention to develop a new or continue an

TABLE 215-5
 UV Dose Table for *Cryptosporidium*,
Giardia lamblia, and Virus Inactivation Credit

existing watershed control program no later than two years before the applicable treatment compliance date in R309-215-15(13).

(B) Watershed control plan no later than one year before the applicable treatment compliance date in R309-215-15(13).

(C) Annual watershed control program status report every 12 months, beginning one year after the applicable treatment compliance date in R309-215-15(13).

(D) Watershed sanitary survey report:

(I) For community water systems, every three years beginning three years after the applicable treatment compliance date in R309-215-15(13).

(II) For noncommunity water systems, every five years beginning five years after the applicable treatment compliance date in R309-215-15(13).

(ii) Alternative source/intake management:

(A) Verification that system has relocated the intake or adopted the intake withdrawal procedure reflected in monitoring results No later than the applicable treatment compliance date in R309-215-15(13).

(iii) Presedimentation: Monthly verification of the following:

(A) Continuous basin operation

(B) Treatment of 100% of the flow

(C) Continuous addition of a coagulant

(D) At least 0.5-log mean reduction of influent turbidity or compliance with alternative Director-approved performance criteria.

(E) Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(iv) Two-stage lime softening: Monthly verification of the following:

(A) Chemical addition and hardness precipitation

occurred in two separate and sequential softening stages prior to filtration.

(B) Both stages treated 100% of the plant flow.

(C) Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(v) Bank filtration:

(A) Initial demonstration of the following no later than the applicable treatment compliance date in R309-215-15(13).

(I) Unconsolidated, predominantly sandy aquifer

(II) Setback distance of at least 25 ft. (0.5-log credit) or 50 ft. (1.0-log credit).

(B) If monthly average of daily max turbidity is greater than 1 NTU then system must report result and submit an assessment of the cause. The report is due within 30 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(vi) Combined filter performance:

(A) Monthly verification of combined filter effluent (CFE) turbidity levels less than or equal to 0.15 NTU in at least 95 percent of the 4 hour CFE measurements taken each month.

(B) Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(vii) Individual filter performance. Monthly verification of the following:

(A) Individual filter effluent (IFE) turbidity levels less than or equal to 0.15 NTU in at least 95 percent of samples each month in each filter.

(B) No individual filter greater than 0.3 NTU in two consecutive readings 15 minutes apart.

(C) Monthly reporting within 10 days following the month in which the monitoring was conducted, beginning on

the applicable treatment compliance date in R309-215-15(13).

(viii) Demonstration of performance.

(A) Results from testing following a Director approved protocol no later than the applicable treatment compliance date in R309-215-15(13).

(B) As required by the Director, monthly verification of operation within conditions of Director approval for demonstration of performance credit within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(ix) Bag filters and cartridge filters.

(A) Demonstration that the following criteria are met no later than the applicable treatment compliance date in R309-215-15(13).

(I) Process meets the definition of bag or cartridge filtration;

(II) Removal efficiency established through challenge testing that meets criteria in this subpart.

(B) Monthly verification that 100% of plant flow was filtered within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(x) Membrane filtration.

(A) Results of verification testing demonstrating the following no later than the applicable treatment compliance date in R309-215-15(13).

(I) Removal efficiency established through challenge testing that meets criteria in this subpart;

(II) Integrity test method and parameters, including resolution, sensitivity, test frequency, control limits, and associated baseline.

(B) Monthly report summarizing the following within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(I) All direct integrity tests above the control limit;

(II) If applicable, any turbidity or alternative Director-approved indirect integrity monitoring results triggering direct integrity testing and the corrective action that was taken.

(xi) Second stage filtration: Monthly verification that 100% of flow was filtered through both stages and that first stage was preceded by coagulation step within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(xii) Slow sand filtration (as secondary filter): Monthly verification that both a slow sand filter and a preceding separate stage of filtration treated 100% of flow from surface water sources within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(xiii) Chlorine dioxide: Summary of CT values for each day as described in R309-215-15(19) within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(xiv) Ozone: Summary of CT values for each day as described in R309-215-15(19) within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(xv) UV:

(A) Validation test results demonstrating operating conditions that achieve required UV dose no later than the applicable treatment compliance date in R309-215-15(13).

(B) Monthly report summarizing the percentage of water entering the distribution system that was not treated by

UV reactors operating within validated conditions for the required dose as specified in R309-215-15(19) (d) within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R309-215-15(13).

(21) Recordkeeping requirements.

(a) Systems must keep results from the initial round of source water monitoring under R309-215-15(2)(a) and the second round of source water monitoring under R309-215-15(2)(b) until 3 years after bin classification under R309-215-15(11) for filtered systems for the particular round of monitoring.

(b) Systems must keep any notification to the Director that they will not conduct source water monitoring due to meeting the criteria of R309-215-15(2)(d) for 3 years.

(c) Systems must keep the results of treatment monitoring associated with microbial toolbox options under R309-215-15(15) through R309-215-15(19) for 3 years.

(22) Requirements for Sanitary Surveys Performed by EPA. Requirements to respond to significant deficiencies identified in sanitary surveys performed by EPA.

(a) A sanitary survey is an onsite review of the water source (identifying sources of contamination by using results of source water assessments where available), facilities, equipment, operation, maintenance, and monitoring compliance of a PWS to evaluate the adequacy of the PWS, its sources and operations, and the distribution of safe drinking water.

(b) For the purposes of this section, a significant deficiency includes a defect in design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that EPA determines to be causing, or has the potential for causing the introduction of contamination into the water delivered to consumers.

(c) For sanitary surveys performed by EPA, systems must respond in writing to significant deficiencies identified in sanitary survey reports no later than 45 days after receipt of the report, indicating how and on what schedule the system will address significant deficiencies noted in the survey.

(d) Systems must correct significant deficiencies identified in sanitary survey reports according to the schedule approved by EPA, or if there is no approved schedule, according to the schedule reported under paragraph (c) of this section if such deficiencies are within the control of the system.

R309-215-16. Groundwater Rule.

(1) Applicability: This subpart applies to all public water systems that use ground water except that it does not apply to public water systems that combine all of their ground water with surface water or with ground water under the direct influence of surface water prior to treatment. For the purposes of this subpart, "ground water system" is defined as any public water system meeting this applicability, including consecutive systems receiving finished ground water.

(a) General requirements: Systems subject to this subpart must comply with the following requirements:

(i) Sanitary survey information requirements for all ground water systems as described in R309-100-7.

(ii) Microbial source water monitoring requirements for ground water systems that do not treat all of their ground water to at least 99.99 percent (4-log) treatment of viruses (using inactivation, removal, or an Director-approved combination of 4-log virus inactivation and removal) before or at the first customer as described in R309-215-16(2).

(iii) Treatment technique requirements, described in R309-215-16(3), that apply to ground water systems that have fecally contaminated source waters, as determined by source water monitoring conducted under R309-215-16(2), or that

have significant deficiencies that are identified by the Director or that are identified by EPA under SDWA section 1445. A ground water system with fecally contaminated source water or with significant deficiencies subject to the treatment technique requirements of this subpart must implement one or more of the following corrective action options: correct all significant deficiencies; provide an alternate source of water; eliminate the source of contamination; or provide treatment that reliably achieves at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer.

(b) Ground water systems that provide at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer are required to conduct compliance monitoring to demonstrate treatment effectiveness, as described in R309-215-16(3)(b).

(c) If requested by the Director, ground water systems must provide the Director with any existing information that will enable the Director to perform a hydrogeologic sensitivity assessment. For the purposes of this subpart, "hydrogeologic sensitivity assessment" is a determination of whether ground water systems obtain water from hydrogeologically sensitive settings.

(d) Compliance date: Ground water systems must comply, unless otherwise noted, with the requirements of this subpart beginning December 1, 2009.

(2) Ground water source microbial monitoring and analytical methods.

(a) Triggered source water monitoring.

(i) General requirements. A ground water system must conduct triggered source water monitoring if the conditions identified in paragraphs (a)(i)(A) and (a)(i)(B) of this section exist.

(A) The system does not provide at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for each ground water source; and

(B) The system is notified that a sample collected under R309-210-5(1) is total coliform-positive and the sample is not invalidated under R309-210-5(4).

(ii) Sampling Requirements. A ground water system must collect, within 24 hours of notification of the total coliform-positive sample, at least one ground water source sample from each ground water source in use at the time the total coliform-positive sample was collected under R309-210-5(1), except as provided in paragraph (a)(ii)(B) of this section.

(A) The Director may extend the 24-hour time limit on a case-by-case basis if the system cannot collect the ground water source water sample within 24 hours due to circumstances beyond its control. In the case of an extension, the Director must specify how much time the system has to collect the sample.

(B) If approved by the Director, systems with more than one ground water source may meet the requirements of this paragraph (a)(ii) by sampling a representative ground water source or sources. Systems must submit for Director approval a triggered source water monitoring plan that identifies one or more ground water sources that are representative of each monitoring site in the system's sample site plan under R309-210-5(1)(d) and that the system intends to use for representative sampling under this paragraph.

(C) A ground water system serving 1,000 people or fewer may use a repeat sample collected from a ground water source to meet both the requirements of R309-210-5(2)(a) and to satisfy the monitoring requirements of paragraph (a)(ii)

of this section for that ground water source only if the Director approves the use of *E. coli* as a fecal indicator for source water monitoring under this paragraph (a). If the repeat sample collected from the ground water source is *E. coli* positive, the system must comply with paragraph (a)(iii) of this section.

(iii) Additional Requirements. If the Director does not require corrective action under R309-215-16(3)(a)(ii) for a fecal indicator-positive source water sample collected under paragraph (a)(ii) of this section that is not invalidated under paragraph (d) of this section, the system must collect five additional source water samples from the same source within 24 hours of being notified of the fecal indicator-positive sample.

(iv) Consecutive and Wholesale Systems.

(A) In addition to the other requirements of this paragraph (a), a consecutive ground water system that has a total coliform-positive sample collected under R309-210-5(1) must notify the wholesale system(s) within 24 hours of being notified of the total coliform-positive sample.

(B) In addition to the other requirements of this paragraph (a), a wholesale ground water system must comply with paragraphs (a)(iv)(B)(I) and (a)(iv)(B)(II) of this section.

(I) A wholesale ground water system that receives notice from a consecutive system it serves that a sample collected under R309-210-5(1) is total coliform-positive must, within 24 hours of being notified, collect a sample from its ground water source(s) under paragraph (a)(ii) of this section and analyze it for a fecal indicator under paragraph (c) of this section.

(II) If the sample collected under paragraph (a)(iv)(B)(I) of this section is fecal indicator-positive, the wholesale ground water system must notify all consecutive systems served by that ground water source of the fecal indicator source water positive within 24 hours of being notified of the ground water source sample monitoring result and must meet the requirements of paragraph (a)(iii) of this section.

(v) Exceptions to the Triggered Source Water Monitoring Requirements. A ground water system is not required to comply with the source water monitoring requirements of paragraph (a) of this section if either of the following conditions exists:

(A) The Director determines, and documents in writing, that the total coliform-positive sample collected under R309-210-5(1) is caused by a distribution system deficiency; or

(B) The total coliform-positive sample collected under R309-210-5(1) is collected at a location that meets Director criteria for distribution system conditions that will cause total coliform-positive samples.

(b) Assessment Source Water Monitoring. If directed by the Director, ground water systems must conduct assessment source water monitoring that meets Director-determined requirements for such monitoring. A ground water system conducting assessment source water monitoring may use a triggered source water sample collected under paragraph (a)(ii) of this section to meet the requirements of paragraph (b) of this section. Director-determined assessment source water monitoring requirements may include:

(i) collection of a total of 12 ground water source samples that represent each month the system provides ground water to the public,

(ii) collection of samples from each well unless the system obtains written Director approval to conduct monitoring at one or more wells within the ground water system that are representative of multiple wells used by that system and that draw water from the same hydrogeologic setting,

(iii) collection of a standard sample volume of at least 100 mL for fecal indicator analysis regardless of the fecal

indicator or analytical method used,

(iv) analysis of all ground water source samples in accordance with R309-210-4(1) and R309-200-4(3) for the presence of *E. coli*, enterococci, or coliphage,

(v) collection of ground water source samples at a location prior to any treatment of the ground water source unless the Director approves a sampling location after treatment, and

(vi) collection of ground water source samples at the well itself unless the system's configuration does not allow for sampling at the well itself and the Director approves an alternate sampling location that is representative of the water quality of that well.

(c) Invalidation of a fecal indicator-positive ground water source sample.

(i) A ground water system may obtain Director invalidation of a fecal indicator-positive ground water source sample collected under paragraph (a) of this section only under the conditions specified in paragraphs (c)(i)(A) and (B) of this section.

(A) The system provides the Director with written notice from the laboratory that improper sample analysis occurred; or

(B) The Director determines and documents in writing that there is substantial evidence that a fecal indicator-positive ground water source sample is not related to source water quality.

(ii) If the Director invalidates a fecal indicator-positive ground water source sample, the ground water system must collect another source water sample under paragraph (a) of this section within 24 hours of being notified by the Director of its invalidation decision and have it analyzed for the same fecal indicator using the analytical methods in paragraph (c) of this section. The Director may extend the 24-hour time limit on a case-by-case basis if the system cannot collect the source water sample within 24 hours due to circumstances beyond its control. In the case of an extension, the Director must specify how much time the system has to collect the sample.

(d) Sampling location.

(i) Any ground water source sample required under paragraph (a) of this section must be collected at a location prior to any treatment of the ground water source unless the Director approves a sampling location after treatment.

(ii) If the system's configuration does not allow for sampling at the well itself, the system may collect a sample at a Director-approved location to meet the requirements of paragraph (a) of this section if the sample is representative of the water quality of that well.

(e) New Sources. If directed by the Director, a ground water system that places a new ground water source into service after November 30, 2009, must conduct assessment source water monitoring under paragraph (b) of this section. If directed by the Director, the system must begin monitoring before the ground water source is used to provide water to the public.

(f) Public Notification. A ground water system with a ground water source sample collected under paragraph (a) or (b) of this section that is fecal indicator-positive and that is not invalidated under paragraph (d) of this section, including consecutive systems served by the ground water source, must conduct public notification under R309-220-5.

(g) Monitoring Violations. Failure to meet the requirements of paragraphs (a)-(f) of this section is a monitoring violation and requires the ground water system to provide public notification under R309-220-7.

(3) Treatment technique requirements for ground water systems.

(a) Ground water systems with significant deficiencies

or source water fecal contamination.

(i) The treatment technique requirements of this section must be met by ground water systems when a significant deficiency is identified or when a ground water source sample collected under R309-215-16(2)(a)(iii) is fecal indicator-positive.

(ii) If directed by the Director, a ground water system with a ground water source sample collected under R309-215-16(2)(a)(ii), R309-215-16(2)(a)(iv), or R309-215-16(2)(b) that is fecal indicator-positive must comply with the treatment technique requirements of this section.

(iii) When a significant deficiency is identified at a public water system that uses both ground water and surface water or ground water under the direct influence of surface water, the system must comply with provisions of this paragraph except in cases where the Director determines that the significant deficiency is in a portion of the distribution system that is served solely by surface water or ground water under the direct influence of surface water.

(iv) Unless the Director directs the ground water system to implement a specific corrective action, the ground water system must consult with the Director regarding the appropriate corrective action within 30 days of receiving written notice from the Director of a significant deficiency, written notice from a laboratory that a ground water source sample collected under R309-215-16(2)(a)(iii) was found to be fecal indicator-positive, or direction from the Director that a fecal indicator-positive collected under R309-215-16(2)(a)(ii), R309-215-16(2)(a)(iv), or R309-215-16(2)(b) requires corrective action. For the purposes of this subpart, significant deficiencies include, but are not limited to, defects in design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that the Director determines to be causing, or have potential for causing, the introduction of contamination into the water delivered to consumers.

(v) Within 120 days (or earlier if directed by the Director) of receiving written notification from the Director of a significant deficiency, written notice from a laboratory that a ground water source sample collected under R309-215-16(2)(a)(iii) was found to be fecal indicator-positive, or direction from the Director that a fecal indicator-positive sample collected under R309-215-16(2)(a)(ii), R309-215-16(2)(a)(iv), or R309-215-16(2)(b) requires corrective action, the ground water system must either:

(A) have completed corrective action in accordance with applicable Director plan review processes or other Director guidance or direction, if any, including Director-specified interim measures; or

(B) be in compliance with a Director-approved corrective action plan and schedule subject to the conditions specified in paragraphs (a)(v)(B)(I) and (a)(v)(B)(II) of this section.

(I) Any subsequent modifications to a Director-approved corrective action plan and schedule must also be approved by the Director.

(II) If the Director specifies interim measures for protection of the public health pending Director approval of the corrective action plan and schedule or pending completion of the corrective action plan, the system must comply with these interim measures as well as with any schedule specified by the Director.

(vi) Corrective Action Alternatives. Ground water systems that meet the conditions of paragraph (a)(i) or (a)(ii) of this section must implement one or more of the following corrective action alternatives:

- (A) correct all significant deficiencies;
- (B) provide an alternate source of water;
- (C) eliminate the source of contamination; or

(D) provide treatment that reliably achieves at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for the ground water source.

(vii) Special notice to the public of significant deficiencies or source water fecal contamination.

(A) In addition to the applicable public notification requirements of R309-220-5, a community ground water system that receives notice from the Director of a significant deficiency or notification of a fecal indicator-positive ground water source sample that is not invalidated by the Director under R309-215-16(2)(d) must inform the public served by the water system under R309-225-5(8) of the fecal indicator-positive source sample or of any significant deficiency that has not been corrected. The system must continue to inform the public annually until the significant deficiency is corrected or the fecal contamination in the ground water source is determined by the Director to be corrected under paragraph (a)(v) of this section.

(B) In addition to the applicable public notification requirements of R309-220-5, a non-community ground water system that receives notice from the Director of a significant deficiency must inform the public served by the water system in a manner approved by the Director of any significant deficiency that has not been corrected within 12 months of being notified by the Director, or earlier if directed by the Director. The system must continue to inform the public annually until the significant deficiency is corrected. The information must include:

(I) The nature of the significant deficiency and the date the significant deficiency was identified by the Director;

(II) The Director-approved plan and schedule for correction of the significant deficiency, including interim measures, progress to date, and any interim measures completed; and

(III) For systems with a large proportion of non-English speaking consumers, as determined by the Director, information in the appropriate language(s) regarding the importance of the notice or a telephone number or address where consumers may contact the system to obtain a translated copy of the notice or assistance in the appropriate language.

(C) If directed by the Director, a non-community water system with significant deficiencies that have been corrected must inform its customers of the significant deficiencies, how the deficiencies were corrected, and the dates of correction under paragraph (a)(vii)(B) of this section.

(b) Compliance monitoring.

(i) Existing ground water sources. A ground water system that is not required to meet the source water monitoring requirements of this subpart for any ground water source because it provides at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for any ground water source before December 1, 2009, must notify the Director in writing that it provides at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for the specified ground water source and begin compliance monitoring in accordance with paragraph (b)(iii) of this section by December 1, 2009. Notification to the Director must include engineering, operational, or other information that the Director requests to evaluate the submission. If the system subsequently discontinues 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for a ground

water source, the system must conduct ground water source monitoring as required under R309-215-16(2).

(ii) New ground water sources. A ground water system that places a ground water in service after November 30, 2009, that is not required to meet the source water monitoring requirements of this subpart because the system provides at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for the ground water source must comply with the requirements of paragraphs (b)(ii)(A), (b)(ii)(B) and (b)(ii)(C) of this section.

(A) The system must notify the Director in writing that it provides at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for the ground water source. Notification to the Director must include engineering, operational, or other information that the Director requests to evaluate the submission.

(B) The system must conduct compliance monitoring as required under R309-215-16(3)(b)(iii) of this subpart within 30 days of placing the source in service.

(C) The system must conduct ground water source monitoring under R309-215-16(2) if the system subsequently discontinues 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for the ground water source.

(iii) Monitoring requirements. A ground water system subject to the requirements of paragraph (b)(i) or (b)(ii) of this section must monitor the effectiveness and reliability of treatment for that ground water source before or at the first customer as follows:

(A) Chemical disinfection.

(I) Ground water systems serving greater than 3,300 people. A ground water system that serves greater than 3,300 people must continuously monitor the residual disinfectant concentration using analytical methods specified in R444-14-4 at a location approved by the Director and must record the lowest residual disinfectant concentration each day that water from the ground water source is served to the public. The ground water system must maintain the Director-determined residual disinfectant concentration every day the ground water system serves water from the ground water source to the public. If there is a failure in the continuous monitoring equipment, the ground water system must conduct grab sampling every four hours until the continuous monitoring equipment is returned to service. The system must resume continuous residual disinfectant monitoring within 14 days.

(II) Ground water systems serving 3,300 or fewer people. A ground water system that serves 3,300 or fewer people must monitor the residual disinfectant concentration using analytical methods specified in R444-14-4 at a location approved by the Director and record the residual disinfection concentration each day that water from the ground water source is served to the public. The ground water system must maintain the Director-determined residual disinfectant concentration every day the ground water system serves water from the ground water source to the public. The ground water system must take a daily grab sample during the hour of peak flow or at another time specified by the Director. If any daily grab sample measurement falls below the Director-determined residual disinfectant concentration, the ground water system must take follow-up samples every four hours until the residual disinfectant concentration is restored to the Director-determined level. Alternatively, a ground water system that serves 3,300 or fewer people may monitor continuously and meet the requirements of paragraph (b)(iii)(A)(I) of this

section.

(B) Membrane filtration. A ground water system that uses membrane filtration to meet the requirements of this subpart must monitor the membrane filtration process in accordance with all Director-specified monitoring requirements and must operate the membrane filtration in accordance with all Director-specified compliance requirements. A ground water system that uses membrane filtration is in compliance with the requirement to achieve at least 4-log removal of viruses when:

(I) The membrane has an absolute molecular weight cut-off (MWCO), or an alternate parameter that describes the exclusion characteristics of the membrane, that can reliably achieve at least 4-log removal of viruses;

(II) The membrane process is operated in accordance with Director-specified compliance requirements; and

(III) The integrity of the membrane is intact.

(C) Alternative treatment. A ground water system that uses a Director-approved alternative treatment to meet the requirements of this subpart by providing at least 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer must:

(I) Monitor the alternative treatment in accordance with all Director-specified monitoring requirements; and

(II) Operate the alternative treatment in accordance with all compliance requirements that the Director determines to be necessary to achieve at least 4-log treatment of viruses.

(c) Discontinuing treatment. A ground water system may discontinue 4-log treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for a ground water source if the Director determines and documents in writing that 4-log treatment of viruses is no longer necessary for that ground water source. A system that discontinues 4-log treatment of viruses is subject to the source water monitoring and analytical methods requirements of R309-215-16(2) of this subpart.

(d) Failure to meet the monitoring requirements of paragraph (b) of this section is a monitoring violation and requires the ground water system to provide public notification under R309-220-7.

(4) Treatment technique violations for ground water systems.

(a) A ground water system with a significant deficiency is in violation of the treatment technique requirement if, within 120 days (or earlier if directed by the Director) of receiving written notice from the Director of the significant deficiency, the system:

(i) Does not complete corrective action in accordance with any applicable Director plan review processes or other Director guidance and direction, including Director specified interim actions and measures, or

(ii) Is not in compliance with a Director-approved corrective action plan and schedule.

(b) Unless the Director invalidates a fecal indicator-positive ground water source sample under R309-215-16(2)(d), a ground water system is in violation of the treatment technique requirement if, within 120 days (or earlier if directed by the Director) of meeting the conditions of R309-215-16(3)(a)(i) or R309-215-16(3)(a)(ii), the system:

(i) Does not complete corrective action in accordance with any applicable Director plan review processes or other Director guidance and direction, including Director-specified interim measures, or

(ii) Is not in compliance with a Director-approved corrective action plan and schedule.

(c) A ground water system subject to the requirements of R309-215-16(3)(b)(iii) that fails to maintain at least 4-log

treatment of viruses (using inactivation, removal, or a Director-approved combination of 4-log virus inactivation and removal) before or at the first customer for a ground water source is in violation of the treatment technique requirement if the failure is not corrected within four hours of determining the system is not maintaining at least 4-log treatment of viruses before or at the first customer.

(d) Ground water system must give public notification under R309-220-6 for the treatment technique violations specified in paragraphs (a), (b) and (c) of this section.

(5) Reporting and recordkeeping for ground water systems.

(a) Reporting. In addition to the requirements of R309-105-16, a ground water system regulated under this subpart must provide the following information to the Director:

(i) A ground water system conducting compliance monitoring under R309-215-16(3)(b) must notify the Director any time the system fails to meet any Director-specified requirements including, but not limited to, minimum residual disinfectant concentration, membrane operating criteria or membrane integrity, and alternative treatment operating criteria, if operation in accordance with the criteria or requirements is not restored within four hours. The ground water system must notify the Director as soon as possible, but in no case later than the end of the next business day.

(ii) After completing any corrective action under R309-215-16(3)(a), a ground water system must notify the Director within 30 days of completion of the corrective action.

(iii) If a ground water system subject to the requirements of R309-215-16(2)(a) does not conduct source water monitoring under R309-215-16(2)(a)(v)(B), the system must provide documentation to the Director within 30 days of the total coliform positive sample that it met the Director criteria.

(b) Recordkeeping. In addition to the requirements of R309-105-17, a ground water system regulated under this subpart must maintain the following information in its records:

(i) Documentation of corrective actions. Documentation shall be kept for a period of not less than ten years.

(ii) Documentation of notice to the public as required under R309-215-16(3)(a)(vii). Documentation shall be kept for a period of not less than three years.

(iii) Records of decisions under R309-215-16(2)(a)(v)(B) and records of invalidation of fecal indicator-positive ground water source samples under R309-215-16(2)(d). Documentation shall be kept for a period of not less than five years.

(iv) For consecutive systems, documentation of notification to the wholesale system(s) of total-coliform positive samples that are not invalidated under R309-210-5(4). Documentation shall be kept for a period of not less than five years.

(v) For systems, including wholesale systems, that are required to perform compliance monitoring under R309-215-16(3)(b):

(A) Records of the Director-specified minimum disinfectant residual. Documentation shall be kept for a period of not less than ten years.

(B) Records of the lowest daily residual disinfectant concentration and records of the date and duration of any failure to maintain the Director-prescribed minimum residual disinfectant concentration for a period of more than four hours. Documentation shall be kept for a period of not less than five years.

(C) Records of Director-specified compliance requirements for membrane filtration and of parameters specified by the Director for Director-approved alternative treatment and records of the date and duration of any failure to meet the membrane operating, membrane integrity, or

alternative treatment operating requirements for more than four hours. Documentation shall be kept for a period of not less than five years.

KEY: drinking water, surface water treatment plant monitoring, disinfection monitoring, compliance determinations

September 21, 2010

19-4-104

Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.
R309-220. Monitoring and Water Quality: Public Notification Requirements.

R309-220-1. Purpose.

The purpose of this rule is to outline the public notification requirements for public water systems.

R309-220-2 Authority.

R309-220-3 Definitions.

R309-220-4 General public notification requirements.

R309-220-5 Tier 1 Public Notice - Form, manner, and frequency of notice.

R309-220-6 Tier 2 Public Notice - Form, manner, and frequency of notice.

R309-220-7 Tier 3 Public Notice - Form, manner, and frequency of notice.

R309-220-8 Content of the public notice.

R309-220-9 Notice to new billing units or new customers.

R309-220-10 Special notice of the availability of unregulated contaminant monitoring results.

R309-220-11 Special notice for exceedance of the SMCL for fluoride.

R309-220-12 Special notice for nitrate exceedances above MCL by non-community water systems (NCWS), where granted permission by the Director.

R309-220-13 Special Notice for Repeated Failure to Conduct Monitoring of the Source Water for Cryptosporidium and for Failure to Determine Bin Classification or Mean Cryptosporidium Level.

R309-220-14 Notice by Director on behalf of the public water system.

R309-220-15 Standard Health Effects Language.

R309-220-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-220-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-220-4. General Public Notification Requirements.

(1) Violation Categories and Other Situations Requiring a Public Notice:

Each owner or operator of a public water system (community water systems, non-transient non-community water systems, and transient non-community water systems) must give notice for all violations of these rules and for other situations, as listed below. The term "UPDWR violations" is used in this subpart to include violations of the maximum contaminant level (MCL), maximum residual disinfection level (MRDL), treatment technique (TT), monitoring requirements, and testing procedures contained in R309-100 through R309-215.

(a) UPDWR Violations:

(i) Failure to comply with an applicable maximum contaminant level (MCL) or maximum residual disinfectant level (MRDL).

(ii) Failure to comply with a prescribed treatment technique (TT).

(iii) Failure to perform water quality monitoring, as required by the drinking water regulations.

(iv) Failure to comply with testing procedures as prescribed by a drinking water regulation.

(b) Variance and Exemptions Under R309-10 and R309-11.

(i) Operation under a variance or an exemption.

(ii) Failure to comply with the requirements of any schedule that has been set under a variance or exemption.

(c) Special Public Notices

(i) Occurrence of a waterborne disease outbreak or other waterborne emergency.

(ii) Exceedance of the nitrate MCL by non-community water systems (NCWS), where granted permission by the Director under R309-200-5(1)(c), Table 200-1, note (4)(b).

(iii) Exceedance of the secondary maximum contaminant level (SMCL) for fluoride.

(iv) Availability of unregulated contaminant monitoring data.

(v) Other violations and situations determined by the Director to require a public notice under this subpart.

(2) Definition of Public Notice Tiers:

Public notice requirements are divided into three tiers, to take into account the seriousness of the violation or situation and of any potential adverse health effects that may be involved. The public notice requirements for each violation or situation listed in paragraph (1) of this section are determined by the tier to which it is assigned. Each tier is defined below:

(a) Tier 1 public notice -- required for UPDWR violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure.

(b) Tier 2 public notice -- required for all other UPDWR violations and situations with potential to have serious adverse effects on human health.

(c) Tier 3 public notice -- required for all other UPDWR violations and situations not included in Tier 1 and Tier 2.

(3) Required Distribution of Notice

(a) Each public water system must provide public notice to persons served by the water system, in accordance with this rule. Public water systems that sell or otherwise provide drinking water to other public water systems (i.e., to consecutive systems) are required to give public notice to the owner or operator of the consecutive system; the consecutive system is responsible for providing public notice to the persons it serves.

(b) If a public water system has a violation in a portion of the distribution system that is physically or hydraulically isolated from other parts of the distribution system, the Director may allow the system to limit distribution of the public notice to only persons served by that portion of the system which is out of compliance. Permission by the Director for limiting distribution of the notice must be granted in writing.

(c) A copy of the notice must also be sent to the Director, in accordance with the requirements under R309-105-16.

R309-220-5. Tier 1 Public Notice -- Form, Manner and Frequency of Notice.

(1) Violation Categories and Other Situations Requiring a Tier 1 Public Notice:

(a) Violation of the MCL for total coliforms when fecal coliform or E. coli are present in the water distribution system (as specified in R309-200-5(6)(b)), or when the water system fails to test for fecal coliforms or E. coli when any repeat sample tests positive for coliform (as specified in R309-205-5(5));

(b) Violation of the MCL for nitrate, nitrite, or total nitrate and nitrite, as defined in R309-200-5(1)(c), Table 200-1, or when the water system fails to take a confirmation sample within 24 hours of the system's receipt of the first sample showing an exceedance of the nitrate or nitrite MCL, as specified in R309-205-5(1)(e)(ii);

(c) Exceedance of the nitrate MCL by non-community water systems, where permitted to exceed the MCL by the Director under R309-200-5(1)(c), Table 200-1, note (4)(b), as required under R309-220-12;

(d) Violation of the MRDL for chlorine dioxide, as defined in 40 CFR section 141.65(a), when one or more samples taken in the distribution system the day following an exceedance of the MRDL at the entrance of the distribution system exceed the MRDL, or when the water system does not take the required samples in the distribution system, as specified in 40 CFR section 141.133(c)(2)(i);

(e) Violation of the turbidity MCL under R309-200-5(5)(a), where the Director determines after consultation that a Tier 1 notice is required or where consultation does not take place within 24 hours after the system learns of the violation;

(f) Violation of the Surface Water Treatment Rule (SWTR), Interim Enhanced Surface Water Treatment rule (IESWTR) or the Long Term 1 Enhanced Surface Water Treatment rule (LT1ESWTR) treatment technique requirement resulting from a single exceedance of the maximum allowable turbidity limit, where the Director determines after consultation that a Tier 1 notice is required or where consultation does not take place within 24 hours after the system learns of the violation;

(g) Occurrence of a waterborne disease outbreak, as defined in R309-110, or other waterborne emergency (such as a failure or significant interruption in key water treatment processes, a natural disaster that disrupts the water supply or distribution system, or a chemical spill or unexpected loading of possible pathogens into the source water that significantly increases the potential for drinking water contamination);

(h) Other violations or situations with significant potential to have serious adverse effects on human health as a result of short-term exposure, as determined by the Director either in its rules or on a case-by-case basis.

(i) Detection of *E. coli*, enterococci, or coliphage in source water samples as specified in R309-215-16(2)(a) and R309-215-16(2)(b).

(2) Frequency of the Tier 1 Public Notice and Additional Steps Required:

Public water systems must:

(a) Provide a public notice as soon as practical but no later than 24 hours after the system learns of the violation;

(b) Initiate consultation with the Director as soon as practical, but no later than 24 hours after the public water system learns of the violation or situation, to determine additional public notice requirements; and

(c) Comply with any additional public notification requirements (including any repeat notices or direction on the duration of the posted notices) that are established as a result of the consultation with the Director. Such requirements may include the timing, form, manner, frequency, and content of repeat notices (if any) and other actions designed to reach all persons served.

(3) Form and Manner of the Public Notice:

Public water systems must provide the notice within 24 hours in a form and manner reasonably calculated to reach all persons served. The form and manner used by the public water system are to fit the specific situation, but must be designed to reach residential, transient, and non-transient users of the water system. In order to reach all persons served, water systems are to use, at a minimum, one or more of the following forms of delivery:

(a) Appropriate broadcast media (such as radio and television);

(b) Posting of the notice in conspicuous locations throughout the area served by the water system;

(c) Hand delivery of the notice to persons served by the water system; or

(d) Another delivery method approved in writing by the Director.

R309-220-6. Tier 2 Public Notice -- Form, Manner and Frequency of Notice.

(1) Violation Categories And Other Situations Requiring a Tier 2 Public Notice:

(a) All violations of the MCL, MRDL, and treatment technique requirements, except where a Tier 1 notice is required under R309-220-5(1) or where the Director determines that a Tier 1 notice is required;

(b) Violations of the monitoring and testing procedure requirements, where the Director determines that a Tier 2 rather than a Tier 3 public notice is required, taking into account potential health impacts and persistence of the violation; and

(c) Failure to comply with the terms and conditions of any variance or exemption in place.

(d) Failure to take corrective action or failure to maintain at least 4-log treatment of viruses (using inactivation, removal, or an Director-approved combination of 4-log virus inactivation and removal) before or at the first customer under R309-215-16(3)(a).

(2) Frequency of the Tier 2 Public Notice:

(a) Public water systems must provide the public notice as soon as practical, but no later than 30 days after the system learns of the violation. If the public notice is posted, the notice must remain in place for as long as the violation or situation persists, but in no case for less than seven days, even if the violation or situation is resolved. The Director may, in appropriate circumstances, allow additional time for the initial notice of up to three months from the date the system learns of the violation. It is not appropriate for the Director to grant an extension to the 30-day deadline for any unresolved violation or to allow across-the-board extensions by rule or policy for other violations or situations requiring a Tier 2 public notice. Extensions granted by the Director must be in writing.

(b) The public water system must repeat the notice every three months as long as the violation or situation persists, unless the Director determines that appropriate circumstances warrant a different repeat notice frequency. In no circumstance may the repeat notice be given less frequently than once per year. It is not appropriate for the Director to allow less frequent repeat notice for an MCL violation under the Total Coliform Rule or a treatment technique violation under the Surface Water Treatment Rule, Interim Enhanced Surface Water Treatment Rule or Filter Backwash Recycling Rule. It is also not appropriate for the Director to allow through its rules or policies across-the-board reductions in the repeat notice frequency for other ongoing violations requiring a Tier 2 repeat notice. Director determinations allowing repeat notices to be given less frequently than once every three months must be in writing.

(c) For the turbidity violations specified in this paragraph, public water systems must consult with the Director as soon as practical but no later than 24 hours after the public water system learns of the violation, to determine whether a Tier 1 public notice under R309-220-5(1) is required to protect public health. When consultation does not take place within the 24-hour period, the water system must distribute a Tier 1 notice of the violation within the next 24 hours (i.e., no later than 48 hours after the system learns of the violation), following the requirements under R309-220-5(2) and (3). Consultation with the Director is required for:

(i) Violation of the turbidity MCL under R309-200-5(5)(a); or

(ii) Violation of the SWTR, IESWTR or LT1ESWTR treatment technique requirement resulting from a single

exceedance of the maximum allowable turbidity limit.

(3) Form and Manner of the Public Notice:

Public water systems must provide the initial public notice and any repeat notices in a form and manner that is reasonably calculated to reach persons served in the required time period. The form and manner of the public notice may vary based on the specific situation and type of water system, but it must at a minimum meet the following requirements:

(a) Unless directed otherwise by the Director in writing, community water systems must provide notice by:

(i) Mail or other direct delivery to each customer receiving a bill and to other service connections to which water is delivered by the public water system; and

(ii) Any other method reasonably calculated to reach other persons regularly served by the system, if they would not normally be reached by the notice required in paragraph (3)(a)(i) of this section. Such persons may include those who do not pay water bills or do not have service connection addresses (e.g., house renters, apartment dwellers, university students, nursing home patients, prison inmates, etc.). Other methods may include: publication in a local newspaper; delivery of multiple copies for distribution by customers that provide their drinking water to others (e.g., apartment building owners or large private employers); posting in public places served by the system or on the Internet; or delivery to community organizations.

(b) Unless directed otherwise by the Director in writing, non-community water systems must provide notice by:

(i) Posting the notice in conspicuous locations throughout the distribution system frequented by persons served by the system, or by mail or direct delivery to each customer and service connection (where known); and

(ii) Any other method reasonably calculated to reach other persons served by the system if they would not normally be reached by the notice required in paragraph (3)(b)(i) of this section. Such persons may include those served who may not see a posted notice because the posted notice is not in a location they routinely pass by. Other methods may include: publication in a local newspaper or newsletter distributed to customers; use of E-mail to notify employees or students; or, delivery of multiple copies in central locations (e.g., community centers).

R309-220-7. Tier 3 Public Notice -- Form, Manner and Frequency of Notice.

(1) Violation Categories And Other Situations Requiring a Tier 3 Public Notice:

(a) Monitoring violations under R309-205, R309-210 and R309-215, except where a Tier 1 notice is required under R309-220-5(1) or where the Director determines that a Tier 2 notice is required;

(b) Failure to comply with a testing procedure established in R309-205, R309-210 and R309-215, except where a Tier 1 notice is required under R309-220-5(1) or where the Director determines that a Tier 2 notice is required;

(c) Operation under a variance granted under R309-100-10;

(d) Availability of unregulated contaminant monitoring results, as required under R309-220-10; and

(e) Exceedance of the fluoride secondary maximum contaminant level (SMCL), as required under R309-220-11.

(2) Frequency of the Tier 3 Public Notice:

(a) Public water systems must provide the public notice not later than one year after the public water system learns of the violation or situation or begins operating under a variance or exemption. Following the initial notice, the public water system must repeat the notice annually for as long as the violation, variance, exemption, or other situation persists. If the public notice is posted, the notice must remain in place for

as long as the violation, variance, exemption, or other situation persists, but in no case less than seven days (even if the violation or situation is resolved).

(b) Instead of individual Tier 3 public notices, a public water system may use an annual report detailing all violations and situations that occurred during the previous twelve months, as long as the timing requirements of paragraph (2)(a) of this section are met.

(3) Form and Manner of the Public Notice:

Public water systems must provide the initial notice and any repeat notices in a form and manner that is reasonably calculated to reach persons served in the required time period. The form and manner of the public notice may vary based on the specific situation and type of water system, but it must at a minimum meet the following requirements:

(a) Unless directed otherwise by the Director in writing, community water systems must provide notice by:

(i) Mail or other direct delivery to each customer receiving a bill and to other service connections to which water is delivered by the public water system; and

(ii) Any other method reasonably calculated to reach other persons regularly served by the system, if they would not normally be reached by the notice required in paragraph (3)(a)(i) of this section. Such persons may include those who do not pay water bills or do not have service connection addresses (e.g., house renters, apartment dwellers, university students, nursing home patients, prison inmates, etc.). Other methods may include: publication in a local newspaper; delivery of multiple copies for distribution by customers that provide their drinking water to others (e.g., apartment building owners or large private employers); posting in public places or on the Internet; or delivery to community organizations.

(b) Unless directed otherwise by the Director in writing, non-community water systems must provide notice by:

(i) Posting the notice in conspicuous locations throughout the distribution system frequented by persons served by the system, or by mail or direct delivery to each customer and service connection (where known); and

(ii) Any other method reasonably calculated to reach other persons served by the system, if they would not normally be reached by the notice required in paragraph (3)(b)(i) of this section. Such persons may include those who may not see a posted notice because the notice is not in a location they routinely pass by. Other methods may include: publication in a local newspaper or newsletter distributed to customers; use of E-mail to notify employees or students; or, delivery of multiple copies in central locations (e.g., community centers).

(4) Use of the Consumer Confidence Report to meet the Tier 3 public notice requirements:

For community water systems, the Consumer Confidence Report (CCR) required under R309-225 may be used as a vehicle for the initial Tier 3 public notice and all required repeat notices, as long as:

(a) The CCR is provided to persons served no later than 12 months after the system learns of the violation or situation as required under R309-220-7(2);

(b) The Tier 3 notice contained in the CCR follows the content requirements under R309-220-8; and

(c) The CCR is distributed following the delivery requirements under R309-220-7(3).

R309-220-8. Content of the Public Notice.

(1) When a public water system violates a UPDWR or has a situation requiring public notification, each public notice must include the following elements:

(a) A description of the violation or situation, including the contaminant(s) of concern, and (as applicable) the

contaminant level(s);

- (b) When the violation or situation occurred;
 - (c) Any potential adverse health effects from the violation or situation, including the standard language under paragraph (4)(a) or (4)(b) of this section, whichever is applicable;
 - (d) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in their drinking water;
 - (e) Whether alternative water supplies should be used;
 - (f) What actions consumers should take, including when they should seek medical help, if known;
 - (g) What the system is doing to correct the violation or situation;
 - (h) When the water system expects to return to compliance or resolve the situation;
 - (i) The name, business address, and phone number of the water system owner, operator, or designee of the public water system as a source of additional information concerning the notice; and
 - (j) A statement to encourage the notice recipient to distribute the public notice to other persons served, using the standard language under paragraph (4)(c) of this section, where applicable.
- (2) Required elements to be included in the public notice for public water systems operating under a variance or exemption:
- (a) If a public water system has been granted a variance or an exemption, the public notice must contain:
 - (i) An explanation of the reasons for the variance or exemption;
 - (ii) The date on which the variance or exemption was issued;
 - (iii) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and
 - (iv) A notice of any opportunity for public input in the review of the variance or exemption.
 - (b) If a public water system violates the conditions of a variance or exemption, the public notice must contain the ten elements listed in paragraph (1) of this section.
- (3) Presentation of the public notice.
- (a) Each public notice required by this section:
 - (i) Must be displayed in a conspicuous way when printed or posted;
 - (ii) Must not contain overly technical language or very small print;
 - (iii) Must not be formatted in a way that defeats the purpose of the notice;
 - (iv) Must not contain language which nullifies the purpose of the notice.
 - (b) Each public notice required by this section must comply with multilingual requirements, as follows:
 - (i) For public water systems serving a large proportion of non-English speaking consumers, as determined by the Director, the public notice must contain information in the appropriate language(s) regarding the importance of the notice or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the notice or to request assistance in the appropriate language.
 - (ii) In cases where the Director has not determined what constitutes a large proportion of non-English speaking consumers, the public water system must include in the public notice the same information as in paragraph (3)(b)(i) of this section, where appropriate to reach a large proportion of non-English speaking persons served by the water system.
 - (4) Public water systems are required to include the

following standard language in their public notice:

- (a) Standard health effects language for MCL or MRDL violations, treatment technique violations, and violations of the condition of a variance or exemption. Public water systems must include in each public notice the health effects language specified in R309-220-14 corresponding to each MCL, MRDL, and treatment technique violation and for each violation of a condition of a variance or exemption.
 - (b) Standard language for monitoring and testing procedure violations.
- Public water systems must include the following language in their notice, including the language necessary to fill in the blanks, for all monitoring and testing procedure violations: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During (compliance period), we ('did not monitor or test' or 'did not complete all monitoring or testing') for (contaminant(s)), and therefore cannot be sure of the quality of your drinking water during that time."
- (c) Standard language to encourage the distribution of the public notice to all persons served. Public water systems must include in their notice the following language (where applicable): "Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail."

R309-220-9. Notice to New Billing Units or New Customers.

- (1) Community water systems must give a copy of the most recent public notice for any continuing violation, the existence of a variance or exemption, or other ongoing situations requiring a public notice to all new billing units or new customers prior to or at the time service begins.
- (2) Non-community water systems must continuously post the public notice in conspicuous locations in order to inform new consumers of any continuing violation, variance or exemption, or other situation requiring a public notice for as long as the violation, variance, exemption, or other situation persists.

R309-220-10. Special Notice of the Availability of Unregulated Contaminant Monitoring Results.

- (1) Applicability of the special notice: The owner or operator of a community water system or non-transient, non-community water system required to monitor under 40 CFR section 141.40 must notify persons served by the system of the availability of the results of such sampling no later than 12 months after the monitoring results are known.
- (2) Required form and manner of the special notice: The form and manner of the public notice must follow the requirements for a Tier 3 public notice prescribed in R309-220-7(3), (4)(a), and (4)(c). The notice must also identify a person and provide the telephone number to contact for information on the monitoring results.

R309-220-11. Special Notice for Exceedance of the Secondary MCL for Fluoride.

- (1) Applicability of the special notice: Community water systems that exceed the fluoride secondary maximum contaminant level (SMCL) of 2 mg/l as specified in R309-200-6 (determined by the last single sample taken in accordance with R309-205-5), but do not exceed the maximum contaminant level (MCL) of 4 mg/l for fluoride (as specified in R309-200-5), must provide the public notice in

paragraph (3) of this section to persons served. Public notice must be provided as soon as practical but no later than 12 months from the day the water system learns of the exceedance. A copy of the notice must also be sent to all new billing units and new customers at the time service begins and to the State public health officer. The public water system must repeat the notice at least annually for as long as the SMCL is exceeded. If the public notice is posted, the notice must remain in place for as long as the SMCL is exceeded, but in no case less than seven days (even if the exceedance is eliminated). On a case-by-case basis, the Director may require an initial notice sooner than 12 months and repeat notices more frequently than annually.

(2) Required form and manner of the special notice: The form and manner of the public notice (including repeat notices) must follow the requirements for a Tier 3 public notice in R309-220-7(3), (4)(a), and (4)(c).

(3) Required mandatory language to be contained in the special notice: The notice must contain the following language, including the language necessary to fill in the blanks:

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system (name) has a fluoride concentration of (insert value) mg/l.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem.

For more information, please call (name of water system contact) of (name of community water system) at (phone number). Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

R309-220-12. Special Notice for Nitrate Exceedances above MCL by Non-Community Water Systems (NCWS), where Granted Permission by the Director.

(1) Applicability of the special notice: The owner or operator of a non-community water system granted permission by the Director under R309-200-5(1)(c), Table 200-1, note (4)(b) to exceed the nitrate MCL must provide notice to persons served according to the requirements for a Tier 1 notice under R309-220-5 (1) and (2).

(2) Required form and manner of the special notice: Non-community water systems granted permission by the Director to exceed the nitrate MCL under R309-200-5(1)(c), Table 200-1, note (4)(b) must provide continuous posting of the fact that nitrate levels exceed 10 mg/l and the potential health effects of exposure, according to the requirements for Tier 1 notice delivery under R309-220-5(3) and the content

requirements under R309-220-8.

R309-220-13. Special Notice for Repeated Failure to Conduct Monitoring of the Source Water for Cryptosporidium and for Failure to Determine Bin Classification or Mean Cryptosporidium Level.

(1) Applicability of the special notice for repeated failure to monitor: The owner or operator of a community or non-community water system that is required to monitor source water under R309-215-15(2) must notify persons served by the water system that monitoring has not been completed as specified no later than 30 days after the system has failed to collect any 3 months of monitoring as specified in R309-215-15(2)(c). The notice must be repeated as specified in R309-220-6(2).

(2) Applicability of the special notice for failure to determine bin classification: The owner or operator of a community or non-community water system that is required to determine a bin classification under R309-215-15(11) must notify persons served by the water system that the determination has not been made as required no later than 30 days after the system has failed report the determination as specified in R309-215-15(11)(e). The notice must be repeated as specified in R309-220-6(2). The notice is not required if the system is complying with a Director-approved schedule to address the violation.

(3) Required form and manner of the special notice: The form and manner of the public notice must follow the requirements for a Tier 2 public notice prescribed in R309-220-6(3). The public notice must be presented as required in R309-220-8(3).

(4) Required mandatory language to be contained in the special notice: The notice must contain the following language, including the language necessary to fill in the blanks.

(a) The special notice for repeated failure to conduct monitoring must contain the following language: We are required to monitor the source of your drinking water for Cryptosporidium. Results of the monitoring are to be used to determine whether water treatment at the (treatment plant name) is sufficient to adequately remove Cryptosporidium from your drinking water. We are required to complete this monitoring and make this determination by (required bin determination date). We "did not monitor or test" or "did not complete all monitoring or testing on schedule" and, therefore, we may not be able to determine by the required date what treatment modifications, if any, must be made to ensure adequate Cryptosporidium removal. Missing this deadline may, in turn, jeopardize our ability to have the required treatment modifications, if any, completed by the deadline required, (date). For more information, please call (name of water system contact) of (name of water system) at (phone number).

(b) The special notice for failure to determine bin classification or mean Cryptosporidium level must contain the following language: We are required to monitor the source of your drinking water for Cryptosporidium in order to determine by (date) whether water treatment at the (treatment plant name) is sufficient to adequately remove Cryptosporidium from your drinking water. We have not made this determination by the required date. Our failure to do this may jeopardize our ability to have the required treatment modifications, if any, completed by the required deadline of (date). For more information, please call (name of water system contact) of (name of water system) at (phone number).

(c) Each special notice must also include a description of what the system is doing to correct the violation and when the system expects to return to compliance or resolve the

situation.

R309-220-14. Notice by Director on behalf of the Public Water System.

(1) The Director may give the notice required by this rule on behalf of the owner and operator of the public water system if the Director complies with the requirements of this rule.

(2) The owner or operator of the public water system remains responsible for ensuring that the requirements of this rule are met.

R309-220-15. Standard Health Effects Language.

Microbiological Contaminants:

(1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

(2) Fecal coliform/E.Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

(3) Total organic carbon. Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

(4) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Surface Water Treatment Rule (SWTR), Interim Enhanced Surface Water Treatment Rule (IESWTR), Long Term 1 Enhanced Surface Water Treatment Rule (LT1) and Filter Backwash Recycling Rule (FBRR) violations.

(5) Giardia lamblia. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(6) Viruses. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(7) Heterotrophic plate count (HPC) bacteria. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(8) Legionella. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(9) Cryptosporidium. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(10) Fecal Indicators. Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these waste can

cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Radioactive Contaminants:

(11) Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

(12) Beta/photon emitters. Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

(13) Combined Radium 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

(14) Uranium. Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

Inorganic Contaminants:

(15) Antimony. Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

(16) Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

(17) Asbestos. Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.

(18) Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

(19) Beryllium. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

(20) Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

(21) Chromium. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

(22) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

(23) Cyanide. Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

(24) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

(25) Lead. Infants and children who drink water containing lead in excess of the action level could experience

delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

(26) Mercury (inorganic). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

(27) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(28) Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(29) Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

(30) Thallium. Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

Synthetic organic contaminants including pesticides and herbicides:

(31) 2,4-D. Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

(32) 2,4,5-TP (Silvex). Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.

(33) Acrylamide. Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.

(34) Alachlor. Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

(35) Atrazine. Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

(36) Benzo(a)pyrene (PAH). Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

(37) Carbofuran. Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

(38) Chlordane. Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.

(39) Dalapon. Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

(40) Di (2-ethylhexyl) adipate. Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.

(41) Di (2-ethylhexyl) phthalate. Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an

increased risk of getting cancer.

(42) Dibromochloropropane (DBCP). Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

(43) Dinoseb. Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.

(44) Dioxin (2,3,7,8-TCDD). Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

(45) Diquat. Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.

(46) Endothall. Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.

(47) Endrin. Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.

(48) Epichlorohydrin. Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

(49) Ethylene dibromide. Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.

(50) Glyphosate. Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.

(51) Heptachlor. Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.

(52) Heptachlor epoxide. Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.

(53) Hexachlorobenzene. Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.

(54) Hexachlorocyclopentadiene. Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.

(55) Lindane. Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

(56) Methoxychlor. Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.

(57) Oxamyl (Vydate). Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.

(58) PCBs (Polychlorinated biphenyls). Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.

(59) Pentachlorophenol. Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or

kidneys, and may have an increased risk of getting cancer.

(60) Picloram. Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

(61) Simazine. Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

(62) Toxaphene. Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.

Volatile Organic Contaminants:

(63) Benzene. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.

(64) Bromate. Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.

(65) Carbon Tetrachloride. Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

(66) Chloramines. Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.

(67) Chlorine. Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

(68) Chlorite. Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

(69) Chlorine dioxide. Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.

(70) Chlorobenzene. Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.

(71) o-Dichlorobenzene. Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

(72) p-Dichlorobenzene. Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

(73) 1,2-Dichloroethane. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

(74) 1,1-Dichloroethylene. Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

(75) cis-1,2-Dichloroethylene. Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

(76) trans-1,2-Dichloroethylene. Some people who drink water containing trans-1,2-dichloroethylene well in

excess of the MCL over many years could experience problems with their liver.

(77) Dichloromethane. Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.

(78) 1,2-Dichloropropane. Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

(79) Ethylbenzene. Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

(80) Haloacetic Acids (HAA). Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

(81) Styrene. Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

(82) Tetrachloroethylene. Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

(83) 1,2,4-Trichlorobenzene. Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.

(84) 1,1,1-Trichloroethane. Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

(85) 1,1,2-Trichloroethane. Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

(86) Trichloroethylene. Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

(87) TTHMs (Total Trihalomethanes). Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

(88) Toluene. Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.

(89) Vinyl Chloride. Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

(90) Xylenes. Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

KEY: drinking water, public notification, health effects
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19-4-104

R309. Environmental Quality, Drinking Water.**R309-225. Monitoring and Water Quality: Consumer Confidence Reports.****R309-225-1. Purpose.**

This rule establishes the minimum requirements for the content of annual reports that community water systems must deliver to their customers. These reports must contain information on the quality of the water delivered by the systems and characterize the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and understandable manner.

R309-225-2 Authority.

R309-225-3 Definitions.

R309-225-4 General Requirements.

R309-225-5 Content of the reports.

R309-225-6 Required additional health information.

R309-225-7 Report delivery and recordkeeping.

R309-225-8 Major Sources of Contaminants in

Drinking Water.

R309-225-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104 of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-225-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

(1) For the purpose of R309-225, customers are defined as billing units or service connections to which water is delivered by a community water system.

(2) For the purpose of R309-225, detected means: at or above the levels prescribed by R444-14-4(2).

R309-225-4. General Requirements.

(1) This rule applies only to community water systems.

(2) Effective dates.

(a) Each existing community water system must deliver its first report by October 19, 1999, its second report by July 1, 2000, and subsequent reports by July 1 annually thereafter. The first report must contain data collected during, or prior to, calendar year 1998 as prescribed in R309-225-5(4)(c). Each report thereafter must contain data collected during, or prior to, the previous calendar year.

(b) A new community water system must deliver its first report by July 1 of the year after its first full calendar year in operation and annually thereafter.

(c) A community water system that sells water to another community water system must deliver the applicable information required in R309-225-5 to the buyer system:

(i) no later than April 19, 1999, by April 1, 2000, and by April 1 annually thereafter or

(ii) on a date mutually agreed upon by the seller and the purchaser, and specifically included in a contract between the parties.

R309-225-5. Content of the Reports.

(1) Each community water system must provide to its customers an annual report that contains the information specified in this section and R309-225-6.

(2) Information on the source of the water delivered.

(a) Each report must identify the source(s) of the water delivered by the community water system by providing information on:

(i) The type of the water: e.g., surface water, ground water; and

(ii) The commonly used name (if any) and location of

the body (or bodies) of water.

(b) If a source water assessment has been completed, the report must notify consumers of the availability of this information and the means to obtain it. In addition, systems are encouraged to highlight in the report significant sources of contamination in the source water area if they have readily available information. Where a system has received a source water assessment from the Director, the report must include a brief summary of the system's susceptibility to potential sources of contamination, using language provided by the Director or written by the operator.

(3) Definitions.

(a) Each report must include the following definitions:

(i) Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

(ii) Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

(b) A report for a community water system operating under a variance or an exemption issued under R309-100-10 or R309-100-11 must include the following definition: Variances and Exemptions: Director or EPA permission not to meet an MCL or a treatment technique under certain conditions.

(c) A report which contains data on a contaminant that EPA regulates using any of the following terms must include the applicable definitions:

(i) Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

(ii) Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

(iii) Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

(iv) Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

(4) Information on Detected Contaminants.

(a) This sub-section specifies the requirements for information to be included in each report for contaminants subject to mandatory monitoring (except *Cryptosporidium*). It applies to:

(i) Contaminants subject to an MCL, action level, maximum residual disinfectant level, or treatment technique (regulated contaminants);

(ii) Contaminants for which monitoring is required by 40 CFR section 141.40 (unregulated contaminants); and

(iii) Disinfection by-products or microbial contaminants for which monitoring is required by R309-210, R309-215 and 40 CFR sections 141.142 and 141.143, except as provided under paragraph (e)(1) of this section, and which are detected in the finished water.

(b) The data relating to these contaminants must be displayed in one table or in several adjacent tables. Any additional monitoring results which a community water system chooses to include in its report must be displayed separately.

(c) The data must be derived from data collected to comply with EPA and State monitoring and analytical requirements during calendar year 1998 for the first report and subsequent calendar years thereafter except that:

(i) Where a system is allowed to monitor for regulated

contaminants less often than once a year, the table(s) must include the date and results of the most recent sampling and the report must include a brief statement indicating that the data presented in the report are from the most recent testing done in accordance with the regulations. No data older than 5 years need be included.

(ii) Results of monitoring in compliance with federal Information Collection Rule, (40 CFR sections 141.142 and 141.143) need only be included for 5 years from the date of last sample or until any of the detected contaminants becomes regulated and subject to routine monitoring requirements, whichever comes first.

(d) For detected regulated contaminants, the table(s) must contain:

(i) The MCL for that contaminant expressed as a number equal to or greater than 1.0;

(ii) The MCLG for that contaminant expressed in the same units as the MCL;

(iii) If there is no MCL for a detected contaminant, the table must indicate that there is a treatment technique, or specify the action level, applicable to that contaminant, and the report must include the definitions for treatment technique and/or action level, as appropriate, specified in paragraph(3)(c) of this section;

(iv) For contaminants subject to an MCL, except turbidity and total coliforms, the highest contaminant level used to determine compliance with the quality standards listed in R309-200 and the range of detected levels, as follows:

(A) When compliance with the MCL is determined annually or less frequently: the highest detected level at any sampling point and the range of detected levels expressed in the same units as the MCL.

(B) When compliance with the MCL is determined by calculating a running annual average of all samples taken at a sampling point: the highest average of any of the sampling points and the range of all sampling points expressed in the same units as the MCL. For the MCLs for TTHM and HAA5 in R309-200-5(3)(c)(vi), systems must include the highest locational running annual average for TTHM and HAA5 and the range of individual sample results for all monitoring locations expressed in the same units as the MCL. If more than one location exceeds the TTHM and HAA5 MCL, the system must include the locational running annual averages for all locations that exceed the MCL.

(C) When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all samples at all monitoring locations: the average and range of detection expressed in the same units as the MCL. The system is required to include individual sample results for the IDSE conducted under R309-210-9 when determining the range of TTHM and HAA5 results to be reported in the annual consumer confidence report for the calendar year that the IDSE samples were taken.

(D) When rounding of results to determine compliance with the MCL is allowed by the rules, rounding should be done prior to converting the number in order to express it as a number equal to or greater than 1.0.

(v) For turbidity.

(A) When it is reported pursuant to R309-205-8 and R309-215-9: the highest average monthly value.

(B) When it is reported pursuant to R309-215-9: the highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits specified in R309-200-5(5)(a) and (b) for the filtration technology being used. The report should include an explanation of the reasons for measuring turbidity.

(vi) For lead and copper: the 90th percentile value of the most recent round of sampling and the number of sampling sites exceeding the action level.

(vii) For total coliform:

(A) The highest monthly number of positive samples for systems collecting fewer than 40 samples per month; or

(B) The highest monthly percentage of positive samples for systems collecting at least 40 samples per month.

(viii) For fecal coliform: the total number of positive samples.

(ix) The likely source(s) of detected contaminants to the best of the operator's knowledge. Specific information regarding contaminants may be available in sanitary surveys and source water assessments, and should be used when available to the operator. If the operator lacks specific information on the likely source, the report must include one or more of the typical sources for that contaminant listed in R309-225-8 that is most applicable to the system.

(e) If a community water system distributes water to its customers from multiple hydraulically independent distribution systems that are fed by different raw water sources, the table should contain a separate column for each service area and the report should identify each separate distribution system. Alternatively, systems could produce separate reports tailored to include data for each service area.

(f) The table(s) must clearly identify any data indicating violations of MCLs, MRDLs or treatment techniques and the report must contain a clear and readily understandable explanation of the violation including: the length of the violation, the potential adverse health effects, and actions taken by the system to address the violation. To describe the potential health effects, the system must use the relevant language in R309-220-14.

(g) For detected unregulated contaminants for which monitoring is required (except *Cryptosporidium*), the table(s) must contain the average and range at which the contaminant was detected. The report may include a brief explanation of the reasons for monitoring for unregulated contaminants.

(5) Information on *Cryptosporidium*, radon, and other contaminants.

(a) If the system has performed any monitoring for *Cryptosporidium*, including monitoring performed to satisfy the requirements of the federal Information Collection Rule (40 CFR section 141.143), which indicates that *Cryptosporidium* may be present in the source water or the finished water, the report must include:

(i) A summary of the results of the monitoring; and

(ii) An explanation of the significance of the results.

(b) If the system has performed any monitoring for radon which indicates that radon may be present in the finished water, the report must include:

(i) The results of the monitoring; and

(ii) An explanation of the significance of the results.

(c) If the system has performed additional monitoring which indicates the presence of other contaminants in the finished water, EPA strongly encourages systems to report any results which may indicate a health concern. To determine if results may indicate a health concern, EPA recommends that systems find out if EPA has proposed a regulation or issued a health advisory for that contaminant by calling the Safe Drinking Water Hotline (800-426-4791). EPA considers detects above a proposed MCL or health advisory level to indicate possible health concerns. For such contaminants, EPA recommends that the report include:

(i) The results of the monitoring; and

(ii) An explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.

(6) Compliance with UPDWR. In addition to the requirements of R309-225-5(4)(f), the report must note any violation that occurred during the year covered by the report of a requirement listed below, and include a clear and readily

understandable explanation of the violation, any potential adverse health effects, and the steps the system has taken to correct the violation.

(a) Monitoring and reporting of compliance data;

(b) Filtration and disinfection prescribed by R309-505 of this part. For systems which have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes which constitutes a violation, the report must include the following language as part of the explanation of potential adverse health effects: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(c) Lead and copper control requirements prescribed by R309-210-6. For systems which fail to take one or more actions prescribed by R309-210-6(1)(c), R309-210-6(2), or R309-210-6(4), the report must include the applicable language in R309-220-14 for lead, copper, or both.

(d) Treatment techniques for Acrylamide and Epichlorohydrin prescribed by R309-215-8. For systems which violate the requirements of R309-215-8, the report must include the relevant language from R309-220-14.

(e) Recordkeeping of compliance data.

(f) Special monitoring requirements prescribed by 40 CFR section 141.40 (unregulated contaminants); and

(g) Violation of the terms of a variance, an exemption, or an administrative or judicial order.

(7) Variances and Exemptions. If a system is operating under the terms of a variance or an exemption issued under R309-100-10 or R309-100-11, the report must contain:

(a) An explanation of the reasons for the variance or exemption;

(b) The date on which the variance or exemption was issued;

(c) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and

(d) A notice of any opportunity for public input in the review, or renewal, of the variance or exemption.

(8) Additional information.

(a) The report must contain a brief explanation regarding contaminants which may reasonably be expected to be found in drinking water including bottled water. This explanation may include the language of paragraphs (8)(a)(i) through (iii) or systems may use their own comparable language. The report also must include the language of paragraph (8)(a)(iv) of this section.

(i) The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

(ii) Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic

and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

(E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

(iii) In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

(iv) Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

(b) The report must include the telephone number of the owner, operator, or designee of the community water system as a source of additional information concerning the report.

(c) In communities with a large proportion of non-English speaking residents, as determined by the Director, the report must contain information in the appropriate language(s) regarding the importance of the report or contain a telephone number or address where such residents may contact the system to obtain a translated copy of the report or assistance in the appropriate language.

(d) The report must include information (e.g., time and place of regularly scheduled board meetings) about opportunities for public participation in decisions that may affect the quality of the water.

(e) The systems may include such additional information as they deem necessary for public education consistent with, and not detracting from, the purpose of the report.

(f) Systems required to comply with R309-215-16.

(i) Any ground water system that receives notice from the Director of a significant deficiency or notice from a laboratory of a fecal indicator-positive ground water source sample that is not invalidated by the Director under R309-215-16(2)(d) must inform its customers of any significant deficiency that is uncorrected at the time of the next report or of any fecal indicator-positive ground water source sample in the next report. The system must continue to inform the public annually until the Director determines that particular significant deficiency is corrected or the fecal contamination in the ground water source is addressed under R309-215-16(3)(a). Each report must include the following elements.

(A) The nature of the particular significant deficiency or the source of the fecal contamination (if the source is known) and the date the significant deficiency was identified by the Director or the dates of the fecal indicator-positive ground water source samples;

(B) If the fecal contamination in the ground water source has been addressed under R309-215-16(3)(a) and the date of such action;

(C) For each significant deficiency or fecal contamination in the ground water source that has not been addressed under R309-215-16(3)(a), the Director-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed; and

(D) If the system receives notice of a fecal indicator-positive ground water source sample that is not invalidated by the Director under R309-215-16(2)(d), the potential health effects using the health effects language of Appendix A of subpart O.

(ii) If directed by the Director, a system with significant deficiencies that have been corrected before the next report is issued must inform its customers of the significant deficiency, how the deficiency was corrected, and the date of correction under paragraph (8)(f)(i) of this section.

R309-225-6. Required Additional Health Information.

(1) All reports must prominently display the following language:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

(2) A system which detects arsenic at levels above 5 micrograms per liter, but below the MCL:

(a) Must include in its report a short informational statement about arsenic, using language such as: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

(b) May write its own educational statement, but only in consultation with the Director.

(3) A system which detects nitrate at levels above 5 mg/L, but below the MCL:

(a) Must include a short informational statement about the impacts of nitrate on children using language such as: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

(b) May write its own educational statement, but only in consultation with the Director.

(4) Every report must include the following lead-specific information:

(a) A short informational statement about lead in drinking water and its effects on children. The statement must include the following information:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. {NAME OF UTILITY} is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

(b) A system may write its own educational statement,

but only in consultation with the Director.

(5) Community water systems that detect TTHM above 0.080 mg/L (milligrams per liter), but below the MCL in R309-200-5(3)(c), as an annual average, monitored and calculated under the provisions of R309-210-8, must include health effects language for TTHMs prescribed in R309-220-14.

(6) Beginning in the report due by July 1, 2002 and ending January 22, 2006, a community water system that detects arsenic above 0.01 milligrams per liter and up to and including 0.05 milligrams per liter must include the arsenic health effects language prescribed in R309-220-14.

R309-225-7. Report Delivery and Recordkeeping.

(1) Except as provided in paragraph (7) of this section, each community water system must mail or otherwise directly deliver one copy of the report to each customer.

(2) The system must make a good faith effort to reach consumers who do not get water bills, using means recommended by the Director. EPA expects that an adequate good faith effort will be tailored to the consumers who are served by the system but are not bill-paying customers, such as renters or workers. A good faith effort to reach consumers would include a mix of methods appropriate to the particular system such as: Posting the reports on the Internet; mailing to postal patrons in metropolitan areas; advertising the availability of the report in the news media; publication in a local newspaper; posting in public places such as cafeterias or lunch rooms of public buildings; delivery of multiple copies for distribution by single-biller customers such as apartment buildings or large private employers; delivery to community organizations.

(3) No later than the date the system is required to distribute the report to its customers, each community water system must mail a copy of the report to the Director, followed within 3 months by a certification that the report has been distributed to customers, and that the information is correct and consistent with the compliance monitoring data previously submitted to the Director.

(4) No later than the date the system is required to distribute the report to its customers, each community water system must deliver the report to any other agency or clearinghouse identified by the Director.

(5) Each community water system must make its reports available to the public upon request.

(6) Each community water system serving 100,000 or more persons must post its current year's report to a publicly-accessible site on the Internet.

(7) The Governor has waived the requirement of paragraph (a) of this section for community water systems serving fewer than 10,000 persons.

(a) Such systems must:

(i) Publish the reports in one or more local newspapers serving the area in which the system is located;

(ii) Inform the customers that the reports will not be mailed, either in the newspapers in which the reports are published or by other means approved by the Director; and

(iii) Make the reports available to the public upon request.

(b) Systems serving 500 or fewer persons may forego the requirements of paragraphs (7)(a)(i) and (ii) of this section if they provide notice at least once per year to their customers by mail, door-to-door delivery or by posting in an appropriate location that the report is available upon request.

(8) Any system subject to this rule must retain copies of its consumer confidence report for no less than 3 years.

R309-225-8. Major Sources of Contaminants in Drinking Water.

Microbiological Contaminants

- (1) Total Coliform Bacteria - Naturally present in the environment.
 - (2) Fecal coliform and E. coli - Human and animal fecal waste.
 - (3) Fecal Indicators (enterococci or coliphage) - Human and animal fecal waste.
 - (4) Turbidity- Soil runoff.
 - (5) Total organic carbon - Naturally present in the environment.
- Radioactive Contaminants
- (6) Alpha emitters (pCi/l) - Erosion of natural deposits.
 - (7) Beta/photon emitters (mrem/yr) - Decay of natural and man-made deposits.
 - (8) Combined radium (pCi/l) - Erosion of natural deposits.
 - (9) Uranium (ug/l) - Erosion of natural deposits.
- Inorganic Contaminants
- (10) Antimony (ppb) - Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
 - (11) Arsenic (ppb) - Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
 - (12) Asbestos (MFL) - Decay of asbestos cement water mains; Erosion of natural deposits.
 - (13) Barium (ppm) - Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
 - (14) Beryllium (ppb) - Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.
 - (15) Cadmium (ppb) - Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints.
 - (16) Chromium (ppb) - Discharge from steel and pulp mills; Erosion of natural deposits.
 - (17) Copper (ppm) - Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
 - (18) Cyanide (ppb) - Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
 - (19) Fluoride (ppm) - Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
 - (20) Lead (ppb) - Corrosion of household plumbing systems; Erosion of natural deposits.
 - (21) Mercury (inorganic) (ppb) - Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
 - (22) Nitrate (as Nitrogen) (ppm) - Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
 - (23) Nitrite (as Nitrogen) (ppm) - Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
 - (24) Selenium (ppb) - Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
 - (25) Thallium (ppb) - Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories.
- Synthetic Organic Contaminants including Pesticides and Herbicides
- (26) 2,4-D (ppb) - Runoff from herbicide used on row crops.
 - (27) 2,4,5-TP (Silvex)(ppb) - Residue of banned herbicide.
 - (28) Acrylamide - Added to water during sewage/wastewater treatment.
 - (29) Alachlor (ppb) - Runoff from herbicide used on row crops.

- (30) Atrazine (ppb) - Runoff from herbicide used on row crops.
- (31) Benzo(a)pyrene (PAH) (nanograms/l) - Leaching from linings of water storage tanks and distribution lines.
- (32) Carbofuran (ppb) - Leaching of soil fumigant used on rice and alfalfa.
- (33) Chlordane (ppb) - Residue of banned termiticide.
- (34) Dalapon (ppb) - Runoff from herbicide used on rights of way.
- (35) Di(2-ethylhexyl) adipate (ppb) - Discharge from chemical factories.
- (36) Di(2-ethylhexyl) phthalate (ppb) - Discharge from rubber and chemical factories.
- (37) Dibromochloropropane (ppt) - Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
- (38) Dinoseb (ppb) - Runoff from herbicide used on soybeans and vegetables.
- (39) Diquat (ppb) - Runoff from herbicide use.
- (40) Dioxin (2,3,7,8-TCDD) (ppq) - Emissions from waste incineration and other combustion; Discharge from chemical factories.
- (41) Endothall (ppb) - Runoff from herbicide use.
- (42) Endrin (ppb) - Residue of banned insecticide.
- (43) Epichlorohydrin - Discharge from industrial chemical factories; An impurity of some water treatment chemicals.
- (44) Ethylene dibromide (ppt) - Discharge from petroleum refineries.
- (45) Glyphosate (ppb) - Runoff from herbicide use.
- (46) Heptachlor (ppt) - Residue of banned pesticide.
- (47) Heptachlor epoxide (ppt) - Breakdown of heptachlor.
- (48) Hexachlorobenzene (ppb) - Discharge from metal refineries and agricultural chemical factories.
- (49) Hexachlorocyclopentadiene (ppb) - Discharge from chemical factories.
- (50) Lindane (ppt) - Runoff/leaching from insecticide used on cattle, lumber, gardens.
- (51) Methoxychlor (ppb) - Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
- (52) Oxamyl (Vydate)(ppb) - Runoff/leaching from insecticide used on apples, potatoes and tomatoes.
- (53) PCBs (Polychlorinated biphenyls) (ppt) - Runoff from landfills; Discharge of waste chemicals.
- (54) Pentachlorophenol (ppb) - Discharge from wood preserving factories.
- (55) Picloram (ppb) - Herbicide runoff.
- (56) Simazine (ppb) - Herbicide runoff.
- (57) Toxaphene (ppb) - Runoff/leaching from insecticide used on cotton and cattle. Volatile Organic Contaminants
- (58) Benzene (ppb) - Discharge from factories; Leaching from gas storage tanks and landfills.
- (59) Bromate (ppb) - By-product of drinking water chlorination.
- (60) Carbon tetrachloride (ppb) - Discharge from chemical plants and other industrial activities.
- (61) Chloramines (ppm) - Water additive used to control microbes.
- (62) Chlorine (ppm) - Water additive used to control microbes.
- (63) Chlorite (ppm) - By-product of drinking water chlorination.
- (64) Chlorine dioxide (ppb) - Water additive used to control microbes.
- (65) Chlorobenzene (ppb) - Discharge from chemical and agricultural chemical factories.
- (66) o-Dichlorobenzene (ppb) - Discharge from

industrial chemical factories.

(67) p-Dichlorobenzene (ppb) - Discharge from industrial chemical factories.

(68) 1,2-Dichloroethane (ppb) - Discharge from industrial chemical factories.

(69) 1,1-Dichloroethylene (ppb) - Discharge from industrial chemical factories.

(70) cis-1,2-Dichloroethylene (ppb) - Discharge from industrial chemical factories.

(71) trans-1,2-Dichloroethylene (ppb) - Discharge from industrial chemical factories.

(72) Dichloromethane (ppb) - Discharge from pharmaceutical and chemical factories.

(73) 1,2-Dichloropropane (ppb) - Discharge from industrial chemical factories.

(74) Ethylbenzene (ppb) - Discharge from petroleum refineries.

(75) Haloacetic Acids (HAA) (ppb) - By-product of drinking water disinfection.

(76) Styrene (ppb)- Discharge from rubber and plastic factories; Leaching from landfills.

(77) Tetrachloroethylene (ppb) - Discharge from factories and dry cleaners.

(78) 1,2,4-Trichlorobenzene (ppb) - Discharge from textile-finishing factories.

(79) 1,1,1-Trichloroethane (ppb) - Discharge from metal degreasing sites and other factories.

(80) 1,1,2-Trichloroethane (ppb) - Discharge from industrial chemical factories.

(81) Trichloroethylene (ppb) - Discharge from metal degreasing sites and other factories.

(82) TTHMs (Total trihalomethanes)(ppb) - By-product of drinking water chlorination.

(83) Toluene (ppm) - Discharge from petroleum factories.

(84) Vinyl Chloride (ppb) - Leaching from PVC piping; Discharge from plastics factories.

(85) Xylenes (ppm) - Discharge from petroleum factories; Discharge from chemical factories.

KEY: drinking water, consumer confidence report, water quality

September 24, 2009

19-4-104

Notice of Continuation March 13, 2015

**R309. Environmental Quality, Drinking Water.
R309-300. Certification Rules for Water Supply Operators.****R309-300-1. Objectives.**

These certification rules are established to promote use of trained, experienced, and efficient personnel in charge of public waterworks and to establish standards whereby operating personnel can demonstrate competency to protect the public health through proficient operation of waterworks facilities.

R309-300-2. Authority.

Utah's Operator Certification Program is authorized by Section 19-4-104.

R309-300-3. Extent of Coverage - To Whom Rules Apply - Effective Date.

These rules shall apply to all community and non-transient non-community drinking water systems and all public drinking water systems that utilize treatment of the drinking water. This shall include both water treatment and distribution systems.

The certification requirements shall become effective February 1, 2001 for non-transient non-community drinking water systems and for community water systems serving less than 800 population utilizing only ground water or wholesale sources. These water systems shall have until February 1, 2003 to meet these requirements. For further information on this program, contact the Division of Drinking Water, telephone 536-4200.

R309-300-4. Definitions.

"Commission" see the definition of: Operator Certification Commission.

"Community Water System" means a public drinking water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

"Continuing Education Unit (CEU)" means ten contact hours of participation in, and successful completion of, an organized and approved continuing education experience under responsible sponsorship, capable direction, and qualified instruction. College credit in approved courses may be substituted for CEUs on an equivalency basis.

"Direct Employment" means that the operator is directly compensated by the drinking water system to operate that drinking water system.

"Direct Responsible Charge" means active on-site charge and performance of operation duties. A person in direct responsible charge is generally an operator of a water treatment plant or distribution system who independently makes decisions during normal operation which can affect the sanitary quality, safety, and adequacy of water delivered to customers. In cases where only one operator is employed by the system, this operator shall be considered to be in direct responsible charge.

"Director" means the Director of the Division of Drinking Water.

"Discipline" means type of certification (Distribution or Treatment).

"Distribution System" means the use of any spring or well source, distribution pipelines, appurtenances, and facilities which carry water for potable use to consumers through a public water supply. Systems which chlorinate groundwater are in this discipline.

"Distribution System Manager" means the individual responsible for all operations of a distribution system.

"Division of Drinking Water" means the Division within the Utah Department of Environmental Quality which

regulates public water supplies.

"Grade" means any one of the possible steps within a certification discipline of either water distribution or water treatment. The water distribution discipline has five steps and the water treatment discipline has four steps. Treatment Grade I and Distribution Small System indicate knowledge and experience requirements for the smallest type of public water supply. Grade IV indicates knowledge and experience levels appropriate for the largest, most complex type of public water supply.

"Grandparent Certificate" means the operator has not been issued an Operator Certificate through the examination process and that a restricted certificate has been issued to the operator which is limited to his current position and system. These certificates cannot be used with any other system should the operator transfer.

"Non-Transient Non-Community Water System" means a public water system that is not a community water system and that regularly serves at least 25 of the same persons for more than six months per year. Examples are separate systems serving workers and schools.

"Operator" means a person who operates, repairs, maintains, and is directly employed by or an appointed volunteer for a public drinking water system.

"Operator Certification Commission" means the Commission appointed by the Director as an advisory Commission on certification.

"Public Drinking Water System" means any drinking water system, either publicly or privately owned, that has at least 15 connections or serves at least 25 people for at least 60 days a year.

"Regional Operator" means a certified operator who is in direct responsible charge of more than one public drinking water system.

"Restricted Certificate" means that the operator has qualified by passing an examination but is in a restricted certification status due to lack of experience as an operator.

"Secretary" means the Secretary to the Operator Certification Commission. This is an individual appointed by the Director to conduct the business of the Commission.

"Specialist" means a person who has successfully passed the written certification exam and meets the required experience, but who is not in direct employment with a Utah public drinking water system.

"Training Coordinating Committee" means the voluntary association of individuals responsible for environmental training in the state of Utah.

"Treatment Plant Manager" means the individual responsible for all operations of a treatment plant.

"Treatment Plant" means those facilities capable of delivering complete treatment to any water (the equivalent of coagulation and/or filtration) serving a public drinking water supply.

"Unrestricted Certificate" means that a certificate of competency has been issued by the Director after considering the recommendation of the Commission. This certificate acknowledges that the operator has passed the appropriate level written examination and has met all certification requirements at the discipline and grade stated on his certificate.

R309-300-5. General Policies.

1. In order to become a certified water operator or specialist, an individual shall pass an examination administered by the Division of Drinking Water or qualify for the grandparent provisions outlined in R309-300-13.

2. Any properly qualified operator (see Minimum Required Qualifications for Utah Waterworks Operators Table 5) may apply for unrestricted certification.

3. Any properly qualified person (see Minimum Required Qualifications for Water System Specialists Table 6) may apply for Specialist certification. A Specialist, regardless of discipline or grade, shall not act as a direct responsible charge operator, or be in direct operation or supervise the direct operation of, any public drinking water system.

4. An individual who holds a current Specialist Certificate may apply for an Operator Certificate of the same discipline and grade upon verification of direct employment with a public drinking water system. An individual who holds a current Operator Certificate (Restricted and Unrestricted) may apply for a Specialist Certificate of the same discipline and grade if that operator leaves the direct employment of a drinking water system.

5. All direct responsible charge operators shall be certified at a minimum of the grade level of the water system with an appropriate certificate. Where 24-hour shift operation is used or required, one operator per shift must be certified at the classification of the system operated.

6. The Director, upon recommendation from the Commission, may waive examination of applicants holding a valid certificate or license issued in compliance with other state certification plans having equivalent standards, and grant reciprocity.

7. A grandparent certificate will require normal renewal as with other certificates and will be restricted to the existing position, person, and system for which it was issued. No further examination will be required unless the grade of the drinking water system increases or the operator seeks to change the certificate discipline or grade. At that time, all normal certification requirements must be met.

8. Every community and non-transient non-community drinking water system and all public systems that utilize treatment/filtration of the drinking water shall have at least one operator certified at the classified grade of the water system. Certification must be appropriate for the type of system operated (treatment and/or distribution).

9. An individual who is issued an Operator Certificate shall be employed by, or an appointed volunteer for, a public drinking water supply located in Utah.

10. If the Distribution Manager, Treatment Plant Manager, or Direct Responsible Charge Operator is changed or leaves a particular water system, the water system management must notify the Secretary to the Operator Certification Commission within ten days by contacting the Division of Drinking Water in writing. Within one year, the person replacing the Distribution Manager, Treatment Plant Manager or Director Responsible Charge Operator must have passed an examination of the appropriate grade and discipline. Direct responsible charge experience may be gained later, together with unrestricted certification as experience is gained.

11. The Secretary to the Commission may suspend or revoke a certificate after due notice and opportunity for a hearing. See Section R309-300-9 for further details.

12. An operator may have the opportunity to take any grade of examination higher than the rating of the system which he operates. If passed, the operator shall be issued a restricted certificate at that higher grade. This certificate can be used to demonstrate that the operator has successfully passed all knowledge requirements for that discipline and grade, but that experience is lacking. This restricted certificate will become unrestricted when the experience requirements are met with written verification for the appropriate discipline and grade, provided it is renewed at the required intervals.

13. The Commission will review on a periodic basis each system's compliance with these rules and will refer those systems in violation to the Director for appropriate action.

Any requirement can be appealed as provided in R305-7.

14. An operator who is acting as the direct responsible charge operator for more than one drinking water system (regional operator) shall not be a grandparent certified operator.

15. The regional operator must have an unrestricted certificate equal to or higher than the grade and discipline of the rating applied to each system he is operating.

16. If the regional operator is operating any system(s) that have both disciplines involved in their rating, the operator must have unrestricted certificates in both disciplines and at the highest grade of the most complex system he is working with.

17. A regional operator shall be within a one hour travel time, under normal work and home conditions, of each drinking water system for which he is considered in direct responsible charge unless a longer travel time is approved by the Director based on availability of certified operators and the distance between community water systems in the area.

18. If the drinking water system has only one certified operator, with the exception of a drinking water system employing a regional operator, the operator must have a back up operator certified in the required discipline(s). The back up certified operator must be within one hour travel time of the drinking water system.

19. At no time will an uncertified operator be allowed to operate a drinking water system covered by these rules unless the operator is within the one year grace period specified in R309-300-5.10.

R309-300-6. Application for Examination.

1. Prior to taking an examination, the operator or specialist must file a written application with the Division of Drinking Water or apply for an online examination with the appropriate agency, accompanied by evidence of his qualifications for certification in accordance with provisions of this plan (see tables on minimum qualifications). Such applications shall be made on forms supplied by the Division.

2. An operator may elect to take any written examination which he believes can be successfully passed. Persons passing such an examination shall be issued restricted certificates for the appropriate discipline and grade.

R309-300-7. Examinations.

1. The time and place of the examination to qualify for a certificate shall be determined by the Commission or a proctor designated by the Commission. All examinations for certification shall be given not less than twice a year, generally at each of 12 district health department offices. All examinations will be conducted at sites designated by the Commission or designated by a proctor designated by the Commission. The written examinations will be graded, and the applicant notified of the results within 30 days. The online examinations will be graded at the site of the examination. If an operator taking the examination fails to pass, the operator may file an application for reexamination at the next available date.

2. The minimum passing grade for all certification exams shall be 70 percent correct on all questions asked.

3. An individual who has failed to pass at least two consecutive written exams, at the same grade level and discipline, may make an application for an oral exam. The oral exam will be administered by at least two Commission members or by other individuals approved by the Director. If the individual fails this exam, he will be given written notice of those areas deficient and asked to reapply for a written examination.

4. Examinations will be given in nine grades, four in water treatment and five water distribution. The examinations

will cover, but not be limited to, the following areas:

- (a) general water supply knowledge;
 - (b) control processes in water treatment or distribution;
 - (c) operation, maintenance, and emergency procedures in treatment or distribution;
 - (d) proper record keeping;
 - (e) laws and requirements, and water quality standards.
5. The written examination for specialist certification will be the same examination that is given for operator certification.
6. The written examination question bank and text matrix shall be reviewed periodically by the Commission.

R309-300-8. Certificates.

1. All certificates shall indicate the discipline for which they were issued as follows:
 - (a) Water Treatment Plant Operator, Unrestricted;
 - (b) Water Treatment Plant Operator, Restricted;
 - (c) Water Distribution Operator, Unrestricted;
 - (d) Water Distribution Operator, Restricted;
 - (e) Water Treatment Specialist;
 - (f) Water Distribution Specialist;
 - (g) Grandparent.
2. A restricted certificate will be issued to those operators who have passed a higher grade examination than the grade for which they have qualified in the experience category. Upon accumulating the necessary experience (see R309-300-19, Table 5 and Table 6), these restricted certificates will become unrestricted with the same renewal date. Certificates issued in the restricted status will be stamped with the word RESTRICTED on the bottom left corner of the certificate.
3. Grandparent certificates will be restricted to the person, position, and water system for which they were issued. These certificates will exempt the holder from further examination but will not be transferable to other persons, drinking water systems or positions.
4. A Specialist Certificate will be issued to those persons who have met the experience requirements and have successfully passed the written examination, but who are not in direct employment with a Utah Public Drinking Water System or in the case of requested conversion (see R309-300-8(5)).
5. An individual who currently holds a valid Utah Operator Certificate and who is no longer directly employed by a Utah drinking water system may request his Operator Certificate be converted to a Specialist Certificate with the same expiration date.
6. All certificates shall continue in effect for a period of three years unless suspended or revoked prior to that time. The certificate must be renewed every three years by payment of a renewal fee and evidence of required training (see R309-300-14). Certificates will expire on December 31, three years from the year of issuance.
7. Failure to remain active in the waterworks field during the three-year life of the Operator Certificate can be cause for denial of the application renewal.
8. Requests for renewal shall be made on the forms supplied by the Division of Drinking Water.
9. A lapsed certificate may be renewed within 6 months of the expiration date by making an application for renewal. A certificate that lapsed more than 6 months earlier, but less than 18 months earlier may be renewed by making application for renewal and by payment of the reinstatement fee or by passing an examination. A certificate that has lapsed 18 months or more may not be renewed and the former certificate holder will be required to meet all requirements for issuance of a new certificate.

R309-300-9. Certificate Suspension and Revocation Procedures.

1. The Secretary shall inform a certificate holder, in writing, if the certificate is being considered for suspension or revocation of an Operator's or Specialist's certificate. The communication shall state the reasons for considering such action and allow the individual an opportunity for a hearing.
2. Grounds for suspending or revoking an Operator's or a Specialist's certificate shall be any of the following:
 - (a) demonstrated disregard for the public health and safety;
 - (b) misrepresentation or falsification of figures and reports, or both, submitted to the State;
 - (c) cheating on a certification exam.
3. Suspension or revocation may be imposed when the circumstances and events were under the certificate holder's control. Disasters or "acts of God" which could not be reasonably anticipated will not be grounds for a suspension or a revocation action.
4. Following an appropriate hearing on these matters, the Commission will make a recommendation to the Director. The recommendation shall include a description of the findings of fact and shall be provided to the certificate holder. The information shall also outline the procedures to reapply for certification at the end of the specified disciplinary period.
5. Any suspension or revocation may be appealed as provided in R305-7.

R309-300-10. Fees.

1. Fees for operator and specialist certification shall be submitted in accordance with Section 63-38-3.
2. Examination fees from applicants who are rejected before examination will be returned to the applicant.
3. Application fees will not be returned.

R309-300-11. Facilities Classification System.

1. All treatment plants and distribution systems shall be classified in accordance with R309-300-19.
2. Classification will be made by either the point system or on a population-served basis, whichever results in a higher classification.
3. When the classification of a system is upgraded or added to existing system ratings, the Director shall make a determination on the timing to be allowed for operators to gain certification at the higher or different level.

R309-300-12. Qualifications of Operators.

1. Minimum qualifications are outlined in Minimum Required Qualifications for Utah Waterworks Operators, Table 5, and Minimum Certification Qualifications for Water System Specialists, Table 6, included with these rules (see Section R309-300-19).
2. Approved high school equivalencies can be substituted for the high school graduation requirement.
3. Education of an operator can be substituted for experience, but no more than 50 percent of the experience may be satisfied by education. Note: The exception to this is in grades I and II, where the "one year of experience" requirement cannot be reduced by any amount of education.
4. Education of a specialist cannot be substituted for the required experience (see Minimum Certification Qualifications for Water System Specialists Table 6).

R309-300-13. Grandparent Certification.

Some community and non-transient non-community water systems that serve a population of 800 or less have operators with Grandparent Certification. Grandparent Certifications will continue to be sufficient for these operators, with the following restrictions:

1. Grandparent Certificates are valid only for the person, position, water system, and classification of water system for which they were issued;

2. A Grandparent Certification that expires and is not renewed as provided in R309-300-8(9) may not be renewed and the operator will be required to apply for certification as provided in this rule; and

3. No new Grandparent Certificates will be issued.

R309-300-14. CEUs and Approved Training.

1. CEUs will be required for renewal of all certificates (grandparent, restricted and unrestricted) according to the following schedule:

TABLE 1

CLASSIFICATION	CEUs REQUIRED IN A 3-YEAR PERIOD
Small System	2
Grade 1	2
Grade 2	2
Grade 3	3
Grade 4	3

2. Grandparent certificates are required to have 2.0 or 3.0 CEUs, as per the water system classification, for certificate renewal. Grandparent certificates issued after the calendar year of 2000 are required to obtain 0.7 CEUs of an approved pre-exam training course as part of the 2.0 CEU renewal requirement. These specific CEUs shall be obtained during the first renewal cycle of said certificate.

3. Groups that currently sponsor approved education activities in Utah are:

The Rural Water Association of Utah;
Salt Lake Community College
Utah Valley State College;
Utah State University at Logan;
Utah Department of Environmental Quality;
Manufacturer's Representatives;
American Water Works Association;
American Backflow Prevention Association.

4. A continuing education unit is defined as 10 contact hours of participation in, and successful completion of, an organized and approved training education experience under qualified instruction.

5. College level education is accepted in drinking water related disciplines upon approval of the Secretary to the Commission as to CEU credits (1 quarter credit hour will equal 1.0 CEU or 1 semester credit hour will equal 1.5 CEUs).

6. All CEUs for certificate renewal shall be subject to review for approval to insure that the training is applicable to waterworks operation and meets CEU criteria. Identification of approved training, appropriate CEU or credit assignment and verification of successful completion is the responsibility of the Secretary to the Commission. Training records will be maintained by the Division of Drinking Water.

7. All in-house or in-plant training which is intended to meet any part of the CEU requirements must be approved by the Secretary to the Commission in writing prior to the training.

8. In-house or in-plant training submitted to the Secretary of the Commission must meet the following general criteria to be approved:

(a) Instruction must be under the supervision of an approved instructor.

(b) An outline must be submitted of the subjects to be covered and the time to be allotted to each area.

(c) A list of the teacher's objectives shall be submitted which will document the essential points of the instruction ("need-to-know" information) and the methods used to

illustrate these principles.

9. One CEU credit will be given for registration and attendance at the annual technical program meeting of the American Water Works Association (AWWA), the Intermountain Section of AWWA, the Rural Water Association of Utah, or the National Rural Water Association.

R309-300-15. Validation of Previously Issued Certificates.

1. All current certificates issued by the Director will remain in effect until their stated date of expiration and may be renewed at any time before this date in accordance with the rules established herein. Certificates will be issued for a three-year period.

2. Those individuals who were issued Grandparent Certificates and subsequently passed an examination within the same discipline, at the same grade, or a higher grade will be issued a new unrestricted certificate which will nullify the existing "Grandparent" certificate.

R309-300-16. Operator Certification Commission.

1. An Operator Certification Commission shall be appointed by the Director from recommendations made by the cooperating agencies. Cooperating agencies are the Utah Department of Environmental Quality, the Utah League of Cities and Towns, the Training Coordinating Committee of Utah, the Intermountain Section of the American Water Works Association, the Civil or Environmental Engineering Departments of Utah's Universities, and the Rural Water Association of Utah.

2. The Commission is charged with the responsibility of conducting all work necessary to promote the program, recommend certification of operators, and oversee the maintenance of records.

3. The Commission shall consist of seven members as follows:

(a) One member shall be a certified operator from a town having a population under 10,000 and will be nominated by the Rural Water Association of Utah.

(b) One member shall be at least a grade III unrestricted certified distribution operator and will be nominated by the American Water Works Association.

(c) One member shall be at least a grade III unrestricted certified water treatment plant operator and will be nominated by the American Water Works Association.

(d) One member shall represent municipal water supply management and will be nominated by the Utah League of Cities and Towns.

(e) One member shall represent the civil or environmental engineering department of a Utah university cooperating with the certification program.

(f) One member shall represent water supply trainers and will be nominated by the Training Coordinating Committee (TCC).

(g) One member shall be a representative for the Division of Drinking Water.

4. Each group represented shall designate its nominee to the Director for a three-year term. Nominations may be accepted or rejected by the Director. Persons may be renominated for successive three-year terms by their sponsor groups. The Director shall notify the sponsoring groups one year in advance of the termination of the Commission member that a nominee will be needed. An appointment to succeed a Commission member who is unable to serve his full term shall be only for the remainder of the unexpired term and shall be submitted by the sponsor groups and approved by the Director as mentioned above.

5. Each year the Commission shall elect from its membership a chairperson and vice-chairperson and such other officers as may be needed to conduct its business.

6. It shall be the duty of the Commission to advise in the preparation of examinations for various grades of operators and advise on the certification criteria used by the Secretary. In addition to these duties, the Commission shall also advertise and promote the program, distribute applications and notices, maintain a register of certified Operators and Specialists, set examination dates and locations, and make recommendations regarding each drinking water system's compliance with these rules.

R309-300-17. Secretary to the Commission.

The Director shall designate a non-voting member of the Commission to serve as its Secretary, who shall be a senior public health representative from the Division of Drinking Water. This Secretary shall serve to coordinate the paperwork for the Commission and to bring issues before the Commission. His duties consist of the following:

1. acting as liaison between the Commission and the water suppliers, and generally promote the program;
2. maintaining records necessary to implement these rules;
3. classifying all water treatment plants and distribution systems in accordance with R309-300-19;
4. notifying sponsor groups of Commission nominations needed;
5. coordinating with Utah's Training Coordinating Committee (TCC) to ensure adequate operator training opportunities throughout the state;
6. serving as a source of public information for operator training opportunities and certified operators available for employment;
7. receiving applications for certification and screen, investigate, verify and evaluate all applications;
8. bringing issues to the Commission for their review;
9. developing and administering operator certification examinations.

R309-300-18. Non-compliance with Certification Program.

1. After appropriate consideration by the Commission, cases of non-compliance will be referred to the Director for appropriate enforcement action.
2. Non-compliance with the certification rules is a violation of R309-102-8. Whenever such a violation occurs, the water system management will be notified in writing by the Division of Drinking Water and will be required to correct the situation.

R309-300-19. Drinking Water System Classification.

This system applies only to those public water supplies operating coagulation and/or filtration treatment plants. This classification system does not apply to those systems operating only chlorination facilities on distribution systems.

Size	Item	Points
Water Supply Source	Maximum population served, peak day	1 pt. per 5,000 or part thereof
	Design flow (avg. day) or peak month's	1 pt. per MGD or part thereof
	Groundwater	3
	Surface water	5
	Average raw water quality (0 to 10)	
	Little or no variation	0
	Raw water quality (other than turbidity) varies enough to require treatment changes less than 10% of the time	2

Treatment	Raw water quality including turbidity varies often enough to require frequent changes in the treatment process	5
	Raw water quality is subject to major changes and may be subject to periodic serious pollution	10
	Aeration for or with CO ₂	2
	pH adjustment	4
	Packed tower aeration	6
	Stability or corrosion control	4
	Taste and odor control	8
	Color control	4
	Iron or Iron/Mn, removal	10
	Ion exchange softening	10
	Chemical precipitation softening	20
	Coagulant addition	4
	Flocculation	6
	Sedimentation	5
	Upflow clarification	14
	Filtration	10
	Disinfection (0-10)	
	No disinfection	0
	Chlorination or comparable	5
	On-site generation of disinfectant	5
	Special processes (including reverse osmosis, electro-dialysis, etc.	15
	Sludge/backwash water disposal (0-5)	
	No disposal to raw water source	0
	Any disposal to raw water source	2
	Any disposal to plant raw water	5
	Laboratory control (0-10)	
	Biological (0-10)	
	All lab work done outside of plant	0
	Colilert process	2
	Membrane filter	3
	Multiple tube of fecal determination	5
	Biological identification	7
	Viral studies or similarly complex work done on-site	10
	Chemical/physical	
	All lab work done outside of plant	0
	Push button or colorimetric methods such as chlorine residual or pH	3
	Additional procedures such as titrations or jar tests	5
	More advanced determinations such as numerous organics	7
	Highly sophisticated instrumentation such as atomic absorption or gas chromatography	10

Grade	1	2	3	4
Population served	1500 or less	1501 to 5000	5001 to 15,000	over 15,000
Water plant points	0-40	41-65	66-90	91-UP

Grade	Small System	1	2	3	4
Population	500 or less	501 to	1501 to	5001 to	

over served 15,000 Distribution points UP	0-10	0-10	10-25	26-50	51-
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Distribution systems are those which use groundwater sources (springs and wells) and which may or may not use chlorination. Classification will generally be made in accordance with the following five classes. The Director may change the classification of a particular distribution system when there are unusual factors affecting the complexity of transmission, mixing of sources, or potential health hazards.

TABLE 5
MINIMUM REQUIRED QUALIFICATIONS FOR
UTAH WATERWORKS OPERATORS

EDUCATION				EXPERIENCE Direct		
Certification Grade (Both Dist. and Treatment)	Degree	Assoc. Degree	High School	Non High School	Respon. Charge Years	Total Years
4	X				2	4
		X			2	6
			X		4	8
				X	5	10
3	X				1	2
		X			1	2
			X		2	4
				X	3	6
2	X				0	2
		X			0	2
			X		0	2
				X	0	3
1 and Small System	X				0	1
		X			0	1
			X		0	1
				X	0	1

Note:

- (1) Experience requirements apply to all operators except those who have been issued "grandparent" certificates.
- (2) At least one half of all experience must be gained at the grade of certification desired.

TABLE 6
Minimum Certification Qualifications
For Water System Specialists

CERTIFICATION GRADE (both Distribution and Treatment)	EXPERIENCE	
	"Hands On" Experience (Years)	Design or Associated Experience (Years)
4	8	10
3	4	8
2	2	4
1	0	0

Note:

1. All experience must be verifiable.
2. All "hands on" experience must be in the area of operation, repair, and maintenance of a public drinking water system.
3. Associated experience may be in the design, construction, and inspection of public drinking water systems and/or direct consultation for public drinking water systems.
4. The required experience, as outlined above, must be either in the "Hands On" category or in the Design or Associated category, not in combination.
5. Persons applying for and passing the specialist exam who do not meet the minimum qualifications will be issued a restricted certificate similar to the water system operator restricted certificate.
6. Restricted Specialist Certificate shall be changed to unrestricted status upon written request of certificate holder after minimum experience qualifications have been met.

R309. Environmental Quality, Drinking Water.**R309-305. Certification Rules for Backflow Technicians.****R309-305-1. Purpose.**

These rules are established:

- (1) In order to promote the use of trained, experienced professional personnel in protecting the public's health;
- (2) To establish standards for training, examination, and certification of those personnel:
 - (a) involved with cross connection control program administration
 - (b) testing, maintaining and repairing backflow prevention assemblies; and
- (3) To establish standards for the instruction of Backflow Technicians.

R309-305-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(4)(a) of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-305-3. Extent of Coverage.

These rules shall apply to all personnel who will be:

- (1) involved with the administration or enforcement of any cross connection control program being administered by a drinking water system; or
- (2) testing, maintaining and/or repairing any backflow prevention assembly; or
- (3) instructors within the certification program, regardless of institution or program.

R309-305-4. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

- (1) Backflow Technician - An individual who has met the requirements and successfully completed the course of instruction and certification requirements for Class I, II or III backflow technician certification as outlined herein.

- (a) Class I Backflow Technician is a Cross Connection Control Program Administrator.

- (b) Class II Backflow Technician is a Backflow Assembly Tester.

- (c) Class III Backflow Technician is a Backflow Instructor Trainer.

- (2) Class - means the level of certification for a Backflow Technician.

- (3) Director - means the Director of the Division of Drinking Water.

- (4) Performance Examination - means a closed book, hands on demonstration of an individual applicant's ability to conduct an accurate field test on backflow prevention assemblies.

- (5) Proctor - means a Class III Backflow Technician authorized to administer the written or the performance examination.

- (6) Renewal Course - means a course of instruction, approved by the Commission, which is a prerequisite to the renewal of a Backflow Technician's Certificate.

- (7) Secretary to the Commission - means that individual appointed by the Director to conduct the business of the Commission and to make recommendations to the Director regarding the backflow technician certification program.

- (8) Written Examination - means a closed book examination for record used to determine the competency and ability of an individual applicant's understanding of the required course of instruction.

R309-305-5. General.

- (1) Certification Application: Any individual may apply for certification.

- (2) Certification Classes: The classes of certificates shall be: Class I, Class II, and Class III.

- (a) Class I Backflow Technician - Cross Connection Control Program Administrator: This certificate shall be issued to those individuals who are involved in administering a cross connection control program, who have demonstrated their knowledge and ability by successfully completing the approved certification examination.

- (i) These individuals may NOT test, maintain or repair any backflow prevention assembly for purposes of submitting legal documentation of the operational status of a backflow prevention assembly, including performance of any record test demonstrating backflow prevention assembly compliance with required standards. These individuals may test to insure proper testing techniques are being utilized within their jurisdiction.

- (ii) These individuals may conduct plan/design reviews, hazard assessment investigations, compliance inspections, and enforce local laws, codes, rules and regulations and policies within their jurisdictions, and offer technical assistance as needed.

- (b) Class II Backflow Technician - Backflow Assembly Tester: This certificate shall be issued to those individuals who have demonstrated their knowledge and ability by successfully completing the approved written and performance certification examinations.

- (c) Class III Backflow Technician - Backflow Instructor Trainer:

- (i) This certificate shall be issued to those individuals who have successfully completed a 3 year renewal cycle as a Class II Technician and in addition have proven qualified and competent to instruct approved Backflow Technician Certification classes by participating in and successfully completing an approved Class III certification course.

- (ii) In order to successfully complete a Class III certification course, the applicant shall be required to make a presentation about one or more randomly picked topics in backflow prevention, successfully demonstrating the applicant's knowledge of the subject. The applicant shall also successfully complete a performance examination in a manner that demonstrates knowledge and skill with randomly selected available testing equipment; the applicant shall identify, diagnose and document malfunctions of the backflow assembly and verify the design operating criteria are achieved.

- (iii) Class III Backflow Technicians will also be required to attend additional training provided periodically by the Division to ensure knowledge of any regulatory changes and to ensure consistency in the evaluation of applicants.

- (3) Certification Requirements: Those individuals seeking certification as a Backflow Technician must participate in an approved Technician's course of instruction and successfully complete the examination required per class of certification.

- (4) Backflow Technician Course Instructors: All individuals who instruct Backflow Technician training courses must hold a current Class III - Backflow Technician certificate.

- (5)(a) No person shall install, replace or repair a backflow prevention assembly unless that person holds a Class II or Class III Certification.

- (b) This requirement shall not apply when the Backflow Technician is the assembly owner or an employee of the assembly owner.

- (c) No person shall install, replace or repair a backflow prevention assembly that has not been certified as provided in R309-105-12(4).

R309-305-6. Technician Responsibilities.

(1) All technicians shall notify the Division of Drinking Water, local health department and the appropriate public water system of any backflow incident as soon as possible, but within eight hours. The Division can be reached during business hours at 801-536-4200 or after hours at 801-536-4123;

(2) All technicians shall notify the appropriate public water system of a failing backflow prevention assembly within five days;

(3) All technicians shall ensure that acceptable and approved procedures are used for testing, repairing and maintaining any backflow prevention assembly;

(4) All technicians shall report the backflow prevention assembly test results to the appropriate public water system within 30 days;

(5) All technicians shall include, on the test report form, any materials or replacement parts used to repair or to perform maintenance on a backflow prevention assembly;

(6) All technicians shall ensure that any replacement part is equal to or greater than the quality of parts originally supplied within the backflow prevention assembly and are supplied only by the assembly manufacturer or their agent;

(7) All technicians shall not change the design, material, or operational characteristics of the assembly during any repair or maintenance;

(8) All technicians shall perform each test and shall be responsible for the competency and accuracy of all testing and reports thereof;

(9) All technicians shall ensure the status of their technician certification is current; and

(10) All technicians shall be equipped with and competent in the use of all tools, gauges, and equipment necessary to properly test, repair and maintain a backflow prevention assembly.

(11) All technicians shall be responsible for any additional licensure.

R309-305-7. Examinations.

(1) Examination Issuance:

(a) The examination recognized by the Commission for certification shall be issued through the Division of Drinking Water for both initial certification and renewal of certification.

(b) If an individual fails an examination, the individual may submit an application for reexamination on the next available scheduled test date.

(c) Examinations (both written and performance) that are used to determine competency and ability shall be approved by the Cross Connection Control Commission prior to being issued.

(2) Exam Scoring: Class I, Class II and Class III Technician's must successfully complete a written exam with a score of 70% or higher. Class II Technician's must also successfully demonstrate competence and ability in the performance examination, for the testing of a Pressure Vacuum Breaker Assembly, a Spill-Resistant Pressure Vacuum Breaker Assembly, a Double Check Valve Assembly, and a Reduced Pressure Principal Backflow Prevention Assembly.

(a) The performance examination shall be conducted by a minimum of two Class III Technicians.

(b) Each candidate must demonstrate competence. Competence shall be evaluated by a proctor and determined with a pass or fail grade in each of the following areas:

- (i) Properly identify backflow assembly;
- (ii) Properly identify test equipment needed;
- (iii) Properly connect test equipment;
- (iv) Properly test assembly;

- (v) Properly identify assembly malfunctions;
- (vi) Properly diagnose assembly malfunctions; and
- (vii) Properly record test results.

The candidate must receive a pass grade from the proctor in all areas listed above for each assembly tested in order to successfully complete the performance examination.

(c) An individual may apply for reexamination of either portion of the examination a maximum of two times. After a third failing grade, the individual must register for and complete another technician's training course prior to any further reexamination.

(3) Class III Technicians: Class III Technicians shall participate in and successfully complete a Class III Certification course, approved by the Cross Connection Control Commission. Class III Technicians shall maintain their Class II Technician certification.

R309-305-8. Certificates.

(1) Certificate Issuance: For a certificate to be issued, the individual must complete a Technician's training course and pass with a minimum score of 70% the written examination. For Class II and III certificates, successful completion of the performance examination shall also be required.

(2) Certificate Renewal: The Backflow Technician's certificate is issued by the Director and shall expire December 31, three years from the year of issuance.

(a) Backflow Technician certificates shall be issued by the Director after considering the recommendation of the Commission Secretary.

(b) The Backflow Technician's certificate may be renewed up to six months in advance of the expiration date.

(c) A Backflow Technician may retain the Technician's certification number when the Technician renews certification within twelve months after the certification's expiration date. The technician shall not test, maintain or repair any backflow prevention assembly for purposes of submitting legal documentation of the operational status of a backflow prevention assembly as described in R305-5(2)(a)(i).

(d) To renew a Class I or II Technician certificate, the Technician must register for and participate in an approved backflow prevention renewal course, and successfully complete the renewal examination (minimum score of 70%) which shall include a performance portion for Class II Certification.

(e) To renew a Class III Technician certificate, the following criteria shall be met:

(i) In the 3 year certification period a total of three events from the following list shall be obtained in any combination:

(A) Instruction at a Commission approved backflow technician certification or renewal course.

(B) Serve as a proctor for the performance examination at a Commission approved backflow technician certification or renewal course.

(ii) Attendance at a minimum of two of the annual Class III coordination meetings or receive a meeting update from the Commission Secretary.

(iii) Attendance and successful review at a Class III renewal course, as approved by the Cross Connection Control Commission.

(f) Should the applicant fail the renewal written examination (minimum score of 70%), renewal of that existing license shall not be allowed until a passing score is obtained. If the applicant fails to successfully complete the test after three attempts, the applicant shall be required to participate in an approved Backflow Technician's course before retaking the written and performance examinations. Class I Technicians only need to successfully complete the

written examination.

R309-305-9. Certification Revocation.

(1) The Director may suspend or revoke a Backflow Technician's certification, for good cause, including any of the following:

- (a) The certified person has acted in disregard for public health or safety;
 - (b) The certified person has engaged in activities beyond the scope of their certification;
 - (c) The certified person has misrepresented or falsified figures or reports concerning backflow prevention assembly or test results;
 - (d) The certified person has failed to notify proper authorities of a failing backflow prevention assembly within five days, as required by R309-305-6(2);
 - (e) The certified person has failed to notify proper authorities of a backflow incident for which the technician had personal knowledge, as required by R309-305-6(1);
 - (f) The certified person has installed or repaired a backflow prevention assembly that is not certified or has implemented a change in the design, material or operational characteristics of a certified backflow prevention assembly thereby invalidating the backflow assembly certification.
- (2) Disasters or "Acts of God", which could not be reasonably anticipated or prevented, shall not be grounds for suspension or revocation actions.
- (3) The Commission Secretary shall inform the technician, in writing, if the certification is being considered for suspension or revocation. The communication shall state the reasons for considering suspension or revocation, and the technician shall be given an opportunity for a hearing.

R309-305-10. Fees.

- (1) Fees: The fees for certification shall be submitted in accordance with Section 63-38-3.2.
- (2) All fees shall be deposited in a special account to defray the costs of administering the Cross Connection Control and Certification programs.
- (3) Renewal Fees: The renewal fee for all classes of Technicians shall be in accordance with Section 63-38-3.2.
- (4) All fees shall be deposited in a special account to defray the cost of the program.
- (5) All fees are non-refundable.

R309-305-11. Training.

- (1) Training: Minimum training course curriculum, written tests and performance tests shall be established by the Commission and implemented by the Secretary of the Commission for both the Technician Class I and Class II courses and the renewal courses.
 - (a) The length of the initial certification course for a Class I cross connection control program administrator shall be a minimum of 32 hours, including examination time.
 - (b) The length of the initial certification course for a Class II backflow assembly tester shall be a minimum of 32 hours, excluding examination time.
 - (c) The length of each renewal course shall be a minimum of 16 hours including the renewal examination times, for both written and performance.

R309-305-12. Cross Connection Control Commission.

- (1) Appointment of Members: A Cross Connection Control Commission shall be appointed by the Director from nominations made by cooperating agencies.
- (2) Responsibility: The Commission is charged with the responsibility of conducting all work necessary to promote the cross connection program as well as recommending qualified individuals for certification, and overseeing the maintenance

of necessary records.

(3) Representative Agencies: The Commission shall consist of seven members:

- (a) One member (nominated by the League of Cities and Towns) shall represent a community drinking water supply.
- (b) One member (nominated by the Utah Pipes Trades Education Program) shall represent the plumbing trade and must be a licensed Journeyman Plumber.
- (c) One member (nominated by the Utah Mechanical Contractors Association) shall represent the mechanical trade contractors.
- (d) One member (nominated by the Utah Plumbing and Heating Contractors Association) shall represent the non-union plumbing and mechanical contractors and plumbers.
- (e) One member (nominated by the Rural Water Association of Utah) shall represent small water systems.
- (f) One member (nominated by the Utah Chapter American Backflow Prevention Association) shall represent Class II Backflow Technicians and shall be a Backflow Technician.
- (g) One member (nominated by the Utah Association of Plumbing and Mechanical Officials) shall represent plumbing inspection officials and shall be a licensed plumbing inspector.

(4) Term: Each member shall serve a two year term.

(5) Nominations of Members: All nominations of Commission members shall be presented to the Director, who may refuse any nomination.

(6) Unexpired Term: An appointment to succeed a Commission member who is unable to complete his full term shall be for the unexpired term only, and shall be nominated to, and appointed by, the Director in accordance with R309-305-11(1).

(7) Quorum: At least four Commission members shall be required to constitute a quorum to conduct the Commission's business.

(8) Officers: Each year the Commission shall elect officers as needed to conduct its business.

(a) The Commission shall meet at least once a year.

(b) All actions taken by the Commission shall require a minimum of four affirmative votes.

R309-305-13. Secretary of the Commission.

(1) Appointment: The Director shall appoint, with the consent of the Commission, a staff member to function as the Secretary to the Commission. This Secretary shall serve to coordinate the business of the Commission and to bring issues before the Commission.

(2) Duties: The Secretary's duties shall be to:

- (a) act as a liaison between the Commission, certified Technicians, public water suppliers, and the public at large;
- (b) maintain records necessary to implement and enforce these rules;
- (c) notify sponsor agencies of Commission nominations as needed;
- (d) coordinate and review all cross connection control programs, certification training and the certification of Backflow Technicians;
- (e) serve as a source of public information for Certified Technicians, water purveyors, and the public at large;
- (f) receive and process applications for certification;
- (g) investigate and verify all complaints against or concerning certified Backflow Prevention Technicians, and advise the Director regarding any enforcement actions that are being recommended by the Commission;
- (h) develop and administer examinations;
- (i) review and correct examinations.

(3) The Secretary to the Commission is also responsible for making recommendations to the Director regarding

backflow technician certification as provided in these rules.

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**R309. Environmental Quality, Drinking Water.
R309-400. Water System Rating Criteria.**

R309-400-1. Authority.

Under authority of Utah Code Annotated, Section 19-4-104, the Drinking Water Board adopts this rule in order to evaluate a public water system's standard of operation and service delivered in compliance with R309-100 through R309-705 hereinafter referred to as Rules.

R309-400-2. Extent of Coverage.

This rule shall apply to all public water systems as defined in R309-100.

R309-400-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

Corrective Action Plan - an agreement between the Division of Drinking Water and a public drinking water system establishing conditions and timelines for addressing significant deficiencies or E. coli contamination of a drinking water source.

Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

Treatment Technique Violation - failure to correct significant deficiencies, address E. coli positive source contamination or adhere to specific terms of a Corrective Action Plan.

R309-400-4. Water System Ratings.

(1) The Director shall assign a rating to each public water system in order to provide a concise indication of its condition and performance. This rating shall be assigned based on the evaluation of the operation and performance of the water system in accordance with the requirements of the Rules. Points shall be assessed to water systems for each violation of these requirements (R309-100 through R309-705) as the requirements apply to each individual water system. The number of points that shall be assessed is outlined in the following sections of this rule. The number of points represents the threat to the quality of the water and thereby public health.

(2) Points are assessed in the following categories: Quality, Monitoring and Public Notification; Physical Deficiencies; Operator Certification; Cross Connection Control; Drinking Water Source Protection; Administrative Issues; and, Reporting and Record Maintenance.

(3) Based upon the accumulation of points, the public water system shall be assigned one of the following ratings:

(a) Approved - In order to qualify for an Approved rating, the public water system must maintain a point total less than the following:

- (i) Community water system - 150 points;
- (ii) Non-Transient Non-Community water system - 120 points; and
- (iii) Non-Community water system - 100 points.

(b) Not Approved - In order for a public water system to receive a Not Approved rating the accumulation of points for the water system must exceed the totals listed above.

(c) Corrective Action - In order to qualify for a Corrective Action rating the public water system must submit the following:

(i) A written agreement to the Director stating a willingness to comply with the requirements set forth in the Rules; and,

(ii) A compliance schedule and time table agreed upon by the Director outlining the necessary construction or changes to correct any physical deficiencies or monitoring failures; and,

(iii) Proof of the financial ability of the water system or

that the financial arrangements are in place to correct the water system deficiencies.

(iv) The Corrective Action rating shall continue until the total project is completed or until a suitable construction inspection or sanitary survey is conducted to determine the effectiveness of the improvements or the accumulation of points drops below the threshold for a not approved rating whichever is later.

(4) The water system point accumulation shall be adjusted on a quarterly basis or as current information is available to the Director. The appropriate water system rating shall then be adjusted to reflect the current point total.

(5) The Director may at any time rate a water system Not Approved, if an immediate threat to public health exists. This rating shall remain in place until such time as the threat is alleviated and the cause is corrected.

(6) Any water system may appeal its assigned rating or assessed points as provided in R305-7.

R309-400-5. Quality, Monitoring and Public Notification Violations.

(1) Total Coliform Rule: All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5(6); or the monitoring requirements in R309-210-5; and the associated public notification requirements in R309-220. The bacteriological points assessed shall be updated on a monthly basis with the total number of points reflecting the most recent twelve month period or the most recent 4 quarters for those water systems that collect bacteriological samples quarterly, unless otherwise noted.

(a) For each major bacteriological routine monitoring violation, 35 points shall be assessed. For each failure to perform the associated public notification 5 points shall be assessed.

(b) For each minor bacteriological routine monitoring violation, 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(c) For each major bacteriological repeat monitoring violation, 40 points shall be assessed. For each failure to perform the associated public notification 5 points shall be assessed.

(d) For each minor bacteriological repeat monitoring violation, 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(e) For each additional monitoring violation (R309-210-5(2)(e)), 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(f) For each non-acute bacteriological MCL violation (R309-200-5(6)(a)), 40 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.

(g) For each acute bacteriological MCL violation (R309-200-5(6)(b)), 50 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.

(2) Ground Water Rule: All points assessed to public water systems via this subsection are based on violations of the standards in R309-215-16. Points assessed for any significant deficiency shall be deleted as the deficiencies are corrected and are reported to the Director. The bacteriological points assessed shall be updated on a monthly basis with the total number of points reflecting the most recent 12-month period or the most recent four quarters for those water systems that collect bacteriological samples quarterly, unless otherwise noted.

(a) For failure to collect triggered source samples in violation of R309-215-16(2)(a)(i)(A) and (a)(i)(B), 40 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(b) For failure to collect assessment source samples in violation of R309-215-16(2)(b)(i), 5 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(c) For failure to correct a significant deficiency in violation of R309-215-16(4)(a)(i) and (ii), R309-215-16(4)(c) or R309-215-16(4)(d), 35 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(d) For an *Escherichia coli* in violation of R309-215-16(4)(b)(i) and (ii), 40 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(3) Chemical: All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5; or the monitoring requirements in R309-205, 210 and 215; and the associated public notification requirements in R309-220. The chemical assessments shall be updated on a quarterly basis with the total number of points reflecting the most recent compliance period unless otherwise specified. Points for any chemical MCL violation shall remain on record until the quality issue is resolved. Points for any monitoring violation shall be deleted as the required chemical samples are taken and the analytical results are reported to the Director.

(a) Inorganic and Metal Contaminants:

(i) For each major chemical monitoring violation for inorganic and metal contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for inorganic and metal contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for inorganic and metal contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(b) Sulfate (for non-community water systems only):

(i) For each major chemical monitoring violation for sulfate, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for sulfate, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for sulfate, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(c) Radiologic Contaminants:

(i) For each major chemical monitoring violation for radiological contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for radiological contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for radiological contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(d) Asbestos Contaminants:

(i) For each major chemical monitoring violation for

source water or distribution system asbestos, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for source water or distribution system asbestos, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for source water or distribution system asbestos, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(e) Nitrate:

(i) For each routine chemical monitoring violation for nitrate, 50 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each MCL exceedance of nitrate, 60 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(f) Nitrite:

(i) For each routine chemical monitoring violation for nitrite, 35 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each MCL exceedance of nitrite, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(g) Volatile Organic Chemicals:

(i) For each major chemical monitoring violation for volatile organic chemical contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for volatile organic chemical contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for volatile organic chemical contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(h) Pesticides/PCBs/SOCs

(i) For each major chemical monitoring violation for pesticide/PCB/SOC contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for pesticide/PCB/SOC contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for pesticide/PCB/SOC contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(i) Disinfection Byproducts:

(i) Total Trihalomethanes:

(A) For each routine chemical monitoring violation for total trihalomethanes, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for total trihalomethanes, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) Haloacetic Acids (HAA5):

(A) For each routine chemical monitoring violation for HAA5, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for HAA5, 30 points shall be assessed. For each failure to perform the associated

public notification, 5 points shall be assessed.

(iii) Bromate:

(A) For each routine chemical monitoring violation for bromate, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for bromate, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iv) Chlorite:

(A) For each routine chemical monitoring violation for chlorite, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chlorite, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(j) Disinfectant Residuals:

(i) Chlorine:

(A) For each routine chemical monitoring violation for chlorine, 10 points shall be assessed. R309-210-8(3)(a). For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chlorine, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(C) For a disinfected system that does not maintain a trace residual at all points of the distribution system, 2 points shall be assessed. R309-105-10(1) and R309-200-5(7).

(D) For a disinfected system that lacks an adequate number of disinfection residual sample sites, 2 points shall be assessed. R309-210-8(3)(a)(i)(z15).

(ii) Chloramines:

(A) For each routine chemical monitoring violation for chloramines, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chloramines, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iii) Chlorine Dioxide:

(A) For each routine monitoring violation for chlorine dioxide, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each non-acute chlorine dioxide MCL violation, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(C) For each acute chlorine dioxide MCL violation, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(iv) Ground Water Rule, where a water system has received a 4-Log exemption from triggered source water monitoring:

(A) For a ground water treatment facility serving greater than 3300 population lacking equipment to measure chlorine residuals continuously entering the distribution system, 20 points shall be assessed. R309-215-10(1).

(B) For a ground water system serving greater than 3300 people failing to continuously monitor the residual disinfectant concentrations, 10 points shall be assessed. R309-215-16(3)(b)(iii)(A)(I).

(C) For a ground water system serving less than 3300 people failing to collect a daily grab sample during peak demand to monitor the residual disinfectant concentrations, 10 points shall be assessed. R309-215-16(3)(b)(iii)(A)(II).

(D) For a ground water system that during the past year, the disinfection process was not operated uninterrupted while water was being produced, points will be assessed based on

monthly and quarterly treatment reports. R309-200-5(7).

(E) For a ground water system that is required to provide continuous disinfection but fails to do so, 10 points shall be assessed for each month the failure continues. R309-520-6(1).

(k) Lead and Copper:

(i) For each major chemical monitoring violation for lead and copper contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for lead and copper contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) A system that fails to install, by the designated deadline, optimal corrosion control if the lead or copper action level has been exceeded shall be assessed 35 points. For each failure to perform the associated public notification, 10 point shall be assessed.

(iv) A system that fails to install source water treatment if the source waters exceed the lead or copper action level shall be assessed 35 points. For each failure to perform the associated public notification, 10 points shall be assessed.

(v) A system that fails to complete public notification/education if the lead/copper action levels have been exceeded shall be assessed 10 points for each calendar quarter that the system fails to provide public notification/education.

(vi) A system that still exceeds the lead action level and is not on schedule for lead line replacement shall be assessed 5 points annually. For each failure to perform the associated public notification, 2 point shall be assessed.

(vii) A system that fails to notify its customers of their lead and copper sample results, 5 points shall be assessed.

(viii) A system that fails to send the lead and copper certification notice to the Division, 5 points shall be assessed.

(l) Groundwater Turbidity:

(i) For each monitoring violation for turbidity, 35 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each confirmed MCL exceedance of turbidity, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(m) Surface Water Treatment:

(i) For water systems having sources, which are classified as under direct influence from surface water and which fail to abandon, retrofit or provide conventional complete treatment or its equivalent within 18 months of notification shall be assessed 150 points. For the associated failure to perform public notification 10 points shall be assessed. The points shall be assessed as the failure occurs and shall remain on record until adequate treatment is provided or the source is physically disconnected.

(ii) Quality and Monitoring: The surface water treatment assessments shall be updated on a monthly basis with the total number of points reflecting the most recent 12-month period.

(A) Turbidity:

(I) For each turbidity exceedance that requires tier 1 notification under R309-220-5(1)(e) or (f), 50 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(II) For each turbidity exceedance that requires tier 2 notification under R309-220-5(1)(e) or (f), 35 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(III) For each month where the percentage of turbidity interpretations meeting the treatment plant limit is less than 95 percent, 25 points shall be assessed. For the associated

failure to perform public notification, 10 points shall be assessed.

(IV) For any period of time that exceeds 4 hours where the system fails to continuously measure (or perform grab samples) the combined filter effluent turbidity, 50 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(V) For a water system whose failure to repair continuous turbidity monitoring equipment within 5 working days, 50 points shall be assessed.

(B) Disinfection:

(I) For each instance where the disinfectant level in water entering the distribution system is less than 0.2 milligrams per liter for more than 4 hours, 25 points shall be assessed. For the associated failure to perform public notification, 5 points shall be assessed.

(II) For each instance where there is insufficient disinfectant contact time, 35 points shall be assessed. For the associated failure to perform public notification, 5 points shall be assessed.

(iii) Treatment Process Control:

(A) For each instance a treatment facility exceeds the assigned filter rates, 30 points shall be assessed.

(B) For each month a water system fails to verify calibration of the plant turbidimeters, 5 points shall be assessed.

(C) For each month a water system fails to submit a water treatment plant report, 50 points shall be assessed.

R309-400-6. Physical Facilities.

All points assessed to public water systems via this subsection are based upon violation of R309-500 through R309-705 unless otherwise noted. These points shall be assessed and updated upon notification of the Director and shall remain until the violation or deficiency no longer exists.

(1) New Source Approval:

(a) Use of an unapproved source shall be assessed 200 points.

(2) Surface Water Diversion Structures and Impoundments:

(a) For each surface water intake structure that does not allow for withdrawal of water from more than one level if quality significantly varies with depth, 2 points shall be assessed. R309-515-5(5)(a).

(b) Where diversion facilities are not capable of keeping large quantities of fish or debris from entering the intake, 2 points shall be assessed. R309-515-5(5)(e).

(c) Where impoundment reservoirs have not had brush and trees removed to the high water level, 2 points shall be assessed. R309-515-5(6)(a).

(d) Where reservoir watershed management has not provided adequate precautions to limit nutrient loading, 10 points shall be assessed. R309-515-5(6)(d).

(3) Well Sources

(a) For each well that is not equipped with a sanitary seal, or has any unsealed opening into the well casing, 50 points shall be assessed. R309-515-6(6)(i).

(b) For each well that does not utilize food grade mineral oil for pump lubrication, 25 points shall be assessed. R309-515-8(2).

(c) For each well casing that does not terminate at least 12 inches above the well house floor, 18 inches above the final ground surface, or shows evidence of being subject to flooding, 20 points shall be assessed. R309-515-6(6)(b)(vi) and R309-515-6(13)(a) and (d).

(d) For each well fitted with a pitless adaptor that does not maintain a water tight seal throughout, 50 points shall be assessed. R309-515-6(12)(c)(x).

(e) For each wellhead that is not properly secured to

protect the quality of the well water, 20 points shall be assessed. R309-515-6(13)(f).

(f) For each well that is equipped with a pump to waste line that does not discharge with a minimum of 12-inch clearance to the flood rim, 20 points shall be assessed. R309-515-6(12)(d)(ix).

(g) For each well that is equipped with a pump to waste line without a downturned discharge end covered with a No. 4 mesh screen, 5 points shall be assessed. R309-515-6(12)(d)(ix).

(h) For each well that is equipped with a pump to waste line that discharges to a receptacle without local authorization, 2 points shall be assessed.

(i) For each well that does not have a means to permit periodic measurement of water levels, 2 points shall be assessed. R309-515-6(12)(e)(i) and (ii).

(j) For each well casing vent that is not covered with a No. 14 or finer mesh screen, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b).

(k) For each well casing vent that is not downturned, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b). Also Division of Water Rights Rule R655-4-11.7.11.

(l) For each well casing vent that does not have adequate clearance to prevent the contaminants from entering the well, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b).

(m) For each well (excluding the naturally flowing wells) that has discharge piping that is not equipped with 1) a smooth nosed sampling tap 2) check valve 3) pressure gauge 4) means of measuring flow, and 5) shut-off valve, 1 point shall be assessed for each component not present. R309-515-6(12)(d)(iv).

(n) For each well that pumps directly into a distribution system and does not have a means to release trapped air from the discharge piping (for example, release air through an air release vacuum relief valve, through a pump to waste line or pumps directly to a tank), 5 points shall be assessed. R309-515-6(12)(d)(v).

(o) For each well house that is not at least 6 inches above the final ground level, is not sloped to drain, or shows evidence of being subject to flooding, 5 points shall be assessed. R309-515-6(13)(b).

(p) For each well that has a cross connection present in the discharge piping, 20 points shall be assessed. R309-105-12(1) and R309-515-6(12)(d)(iii).

(q) For each well with an air vacuum relief valve on the well discharge piping that is not screened, 2 points shall be assessed. R309-515-6(12)(d)(v).

(r) For each well with an air vacuum relief valve on the well discharge piping that is not downturned, 2 points shall be assessed. R309-515-6(12)(d)(v).

(s) For each well with an air vacuum relief valve on the well discharging piping that does not have a 6-inch clearance to prevent contaminants from entering the piping, 2 points shall be assessed. R309-515-6(12)(d)(v).

(t) For each well that has rotating and electrical equipment that is not provided with protective guards, 2 points shall be assessed.

(4) Spring Sources:

(a) For each spring source that allows surface water to stand or pond upon the spring collection area (within 50 feet from collection devices), 10 or 20 points shall be assessed. The number of points shall be based upon the size and extent of the ponding; the possible source (rainfall or incomplete collection); or the presence of moss or other indicators of long term presence of standing water. R309-515-7 (7)(i).

(b) For each spring area that does not have a minimum of ten feet of relative impervious soil or an acceptable

alternate design with liner, or the spring collection area shows evidence of damaged liner or impervious soil cover, 10 points shall be assessed. R309-515-7(7)(a) and (b).

(c) For each spring area that has deep-rooted vegetation within the fenced collection area, 10 points shall be assessed. R309-515-7(7)(f).

(d) For each spring area that has deep rooted vegetation interfering with the spring collection, 10 points shall be assessed. R309-515-7(7)(f).

(e) For each spring with a spring collection/junction box that does not have a proper shoebox lid, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(2).

(f) For each spring with a spring collection/junction box that does not have a proper gasket on the lid, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(2).

(g) For each spring with a spring collection/junction box that lacks an adequate air vent, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-15.

(h) For each spring with a spring collection/junction box with a vent that is not screened with No. 14 mesh screen, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15.

(i) For each spring with a spring collection/junction box with a vent that is not down-turned or inverted, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15(1).

(j) For each spring with a spring collection/junction box with a vent that does not have sufficient clearance to prevent ice blockage, or is not at least 24 inches above the earthen cover, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15(2).

(k) For each spring with a spring collection/junction box that lacks a raised access entry, at least 4 inches above the spring box or 18 inches above the earthen cover, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(1).

(l) For each spring with a spring collection/junction box that is not secured against unauthorized access, 20 points shall be assessed. R309-515-7(7)(d) and R309-545-14(3).

(m) For each spring collection area without a proper fence, 10 points shall be assessed. R309-515-7(7)(e).

(n) For each spring collection area that does not have a diversion channel, or berm capable of diverting surface water away from the collection area, 5 points shall be assessed. R309-515-7(7)(g).

(o) For each spring system that does not have a permanent flow measuring device, 5 points shall be assessed. R309-515-7(7)(h).

(p) For each spring area with an overflow or a combined overflow/drain discharge that is not screened with a No. 4 mesh screen, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-13.

(q) For each spring collection/junction box overflow that does not have a freefall of 12 to 24 inches between the bottom of the discharge pipe and the surrounding ground, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-13.

(r) For each spring collection/junction box that has any unsealed opening(s) resulting in public health risk, 50 points shall be assessed. R309-515-7(7)(d) and R309-545-9(1).

(5) Pump Stations.

(a) For a pumping facility that does not have a standard pressure gauge on the discharge line, 1 point shall be assessed. R309-540-5(6)(c)(i).

(b) For a pumping facility building without adequate drainage or showing evidence of flooding, 5 points shall be assessed. R309-540-5(2)(a)(v) and (vi).

(c) For a pumping facility where the discharge line from the air release valve is not screened with number 14 non-corrodible mesh screen, 2 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(d) For an air release valve located within a building, if the discharge line terminates less than six inches above the

floor, 2 points shall be assessed. R309-515-6(12)(d)(v) and R309-540-5(6)(b)(ii).

(e) For an air release valve located in a chamber, if the air release valve discharge piping terminates less than 12 inches above grade, or less than one foot above the top of the pipe where the chamber is not subject to flooding, 10 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(f) For a pumping facility where the discharge line from the air release valve is not down-turned, 2 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(g) For a pumping facility where there is inadequate heating, lighting or ventilation, 5 points shall be assessed. R309-540-5(2)(e), (f) and (g).

(h) For a pumping facility where there are cross connections present, 20 points shall be assessed. R309-105-12(1).

(i) For an inline booster pumping facility designed to provide pressure directly to the distribution system, which does not have at least two pumping units such that with any one pump out of service the remaining pump or pumps are capable of meeting the peak day demand of the specific portion of the system served, 20 points shall be assessed. R309-540-5(4)(b).

(j) For a pumping facility which does not have protective guards on rotating and electrical equipment, 2 points shall be assessed. R309-525-21.

(k) For a pumping facility which is not secured against unauthorized access shall be assessed, 5 points. R309-540-5(1)(a)(v).

(6) Hydropneumatic pressure tanks.

(a) For diaphragm or air tanks located below ground without adequate provisions for drainage, maintenance and flood protection, 10 points shall be assessed. R309-540-6(2).

(b) For a pressure tank with a pump cycle that cycles more frequently than once every 4 minutes, 5 points shall be assessed. R309-540-6(5).

(7) Storage:

(a) A water system with uncovered finished water storage shall immediately be assessed a rating of not approved, 200 points shall be assessed. R309-545-9(1) and (2).

(b) For each storage tank roof showing evidence of water ponding with deterioration, 10 points shall be assessed. R309-545-9(4).

(c) For each storage tank that does not have an access to the interior for cleaning and maintenance, 9 points shall be assessed. R309-545-14.

(d) For each storage tank access that does not have a shoebox type lid with a minimum of a 2-inch overlap, 3 points shall be assessed. R309-545-14(2).

(e) For each storage tank access that lacks a proper gasket between the lid and frame, 3 points shall be assessed. R309-545-14(2).

(f) For each storage tank access that lacks a minimum rise of 4 inches above the tank roof or a minimum of 18 inches above an earthen cover, 3 points shall be assessed. R309-545-14(1).

(g) For each storage tank that is not vented, 6 points shall be assessed. R309-545-15.

(h) For each finished water storage tank vent that is not downturned or covered from rain and dust, 2 points shall be assessed. R309-545-15(1).

(i) For each storage tank vent that does not terminate a minimum of 24 inches above the surface of the storage tank roof if the tank is a buried structure, 2 points shall be assessed. R309-545-15(2).

(j) For each storage tank vent that is not screened with number 14 non-corrodible mesh screen, 2 points shall be

assessed. R309-545-15(4).

(k) For each storage tank that lacks an overflow, 15 points shall be assessed. R309-545-13.

(l) For each storage tank overflow that does not terminate 12 to 24 inches above the ground, 5 points shall be assessed. R309-545-13.

(m) For each storage tank overflow that is not screened with number 4 non-corrodible mesh screen, 5 points shall be assessed. R309-545-13(3).

(n) For each storage tank overflow that is connected to a sewer system without an adequate air gap, 5 points shall be assessed. R309-545-13(5).

(o) For each storage tank with a drain that does not discharge through a physical airgap of at least 2 pipe diameters, 5 points shall be assessed. R309-545-10(1).

(p) For each storage tank with inadequate or improper means of site drainage or showing evidence of standing surface water within 50 feet of the tank, 5 points shall be assessed. R309-545-7(4).

(q) For each storage tank with any unsealed roof or wall penetrations, 50 points shall be assessed. R309-545-9(2).

(r) For each storage tank where the roof and sidewalls show signs of deterioration, 10 to 50 points shall be assessed based upon the size and number of cracks, the loss of structural integrity, and the access of contamination to the drinking water. R309-545-9(1).

(s) For each storage tank without a safe access (such as ladders for tanks in excess of 20 feet, ladder guards, or railings) or safely located entrance hatches, 2 points shall be assessed. R309-545-19(1), (2) and (3).

(t) For each storage tank with internal coatings not in compliance with ANSI/NSF standard 61, 30 points shall be assessed. R309-545-11.

(u) For a storage facility that is not secured against unauthorized access, 20 points shall be assessed. R309-545-14(3).

(8) Distribution System:

(a) A water system that fails to provide the minimum water pressures as required in R309-105-9 at all times and at all locations within the distribution system, 50 points shall be assessed. R309-105-9 and R309-550-5(1).

(b) A water system using pipe and materials not meeting the ANSI/NSF 61 standard shall be assessed 30 points. R309-550-6.

(c) A water system with pipelines installed without adequate separation distance from the sanitary sewer lines shall be assessed 30 points. R309-550-7.

(d) A new water system constructed after January 1, 2007 or an existing water system modification without adequate pressure as defined in R309-105-9(2) shall be assessed 50 points.

(e) A water system which has a distribution line that crosses under a surface water body without adequate protection as outlined in R309-550-8(8)(b) shall be assessed 50 points.

(f) A water system which has distribution system flushing devices, blow-offs or air relief valves, which are directly connected to a sewer or do not have a proper air gap, shall be assessed 20 points. R309-550-6 and R309-550-9.

(g) For a water system that does not properly follow the AWWA disinfection standards 10 points shall be assessed. R309-550-8(10).

(h) For a water system that is required by the local fire authority to provide fire protection or has fire hydrants connected with water mains less than 8 inches in diameter, 5 points shall be assessed. These points will only be assessed for water mains installed after 1995. R309-550-5(4) and (5).

(i) For each air relief valve vent piping, which is not screened with a No. 14 mesh and downturned, 10 points shall

be assessed. R309-550-6(6)(b).

(j) For an air release valve located in a chamber, if the air release valve discharge piping terminates less than 12 inches above grade or less than one foot above the top of the pipe where the chamber is not subject to flooding, 10 points shall be assessed. R309-550-6(6)(b).

(k) For each air relief valve located in a chamber without a drain or adequate sump, or showing evidence of being subject to flooding, 30 points shall be assessed. R309-550-7.

(l) For each air vacuum release valve chamber that is flooded at the time of inspection, 50 points shall be assessed.

(m) For an unprotected cross-connection in the distribution system as required in R309-550-9, 50 points shall be assessed.

(9) Quantity requirements

(a) A water system without sufficient source capacity to meet peak day and average yearly flow requirements, from 10 to 50 points shall be assessed. The number of points shall be based upon the severity of the shortage, including the number of times and duration of water outages or low pressure. R309-510-7.

(b) A water system without sufficient storage capacity to meet average day demand, plus the required fire suppression volume if applicable, 10 to 50 points shall be assessed. The number of points shall be based upon the severity of the shortage including the number of times and duration of water outages. R309-510-8.

R309-400-7. Treatment Processes.

(1) General Treatment.

(a) For a treatment facility without anti-siphon control to assure that liquid chemical solutions cannot be siphoned through solution feeders into the process units, 2 points shall be assessed. R309-525-11(9)(b)(ii) and (c).

(b) For a treatment facility with a process tank that is not properly labeled to designate the chemical contained, 2 points shall be assessed. R309-525-11(8)(c)(vii).

(c) For a treatment facility with chemicals not stored in covered or unopened shipping containers, unless the chemical is transferred into a covered storage unit, 2 points shall be assessed. R309-525-11(6)(a)(iii).

(d) For a treatment facility with no cross connection control provided to assure that no direct connections exist between any sewer and the drain or overflow from the feeder, solution chamber, or tank by providing that all pipes terminate at least six inches or two pipe diameters, whichever is greater, above the overflow rim of a receiving sump, conduit, or waste receptacle, 10 points shall be assessed. R309-525-11(9)(b)(iii).

(e) For a treatment facility with no spare parts available for all feeders to replace parts that are subject to wear and damage, 2 points shall be assessed. R309-525-11(7)(b)(v).

(f) For a treatment facility where incompatible chemicals are fed, stored or handled together, 2 points shall be assessed. R309-525-11(7)(a)(iv).

(g) For a treatment facility where daily operating records do not reflect chemical dosages and total quantities used, 2 points shall be assessed. R309-105-14(3).

(h) For a water system that fails to maintain and properly calibrate all instrumentation needed to verify the treatment process, 2 points shall be assessed. R309-525-25(4).

(i) For a treatment facility without the means to accurately measure the quantities of chemicals used, 20 points shall be assessed. R309-525-11(7)(a)(i) and R309-525-11(6)(b)(iii).

(j) A water system that does not keep acids and caustics in closed corrosion-resistant shipping containers or storage

units, 2 points shall be assessed. R309-525-11(11)(a)(i).

(k) For a treatment facility that does not have the vent hose from the feeder to discharge to the outside atmosphere above grade or have the end covered with #14 non-corrodible mesh screen, 2 points shall be assessed. R309-520-7(2)(f).

(l) For a treatment facility that uses any chemical that is added to water being treated for use in a public water system for human consumption that does not comply with ANSI/NSF Standard 60, 25 points shall be assessed. R309-525-11(5).

(m) For a treatment facility that does not have a finished water sampling tap(s), 2 points shall be assessed. R309-525-18.

(n) For a treatment facility that is not performing adequate process control testing consistent with the specific treatment process, 30 points shall be assessed. R309-525-19.

(o) For a surface water treatment facility that does not have continuous residual disinfection equipment to measure the residual in mg/L entering the distribution system, 20 points shall be assessed. R309-215-10(1).

(p) For a treatment facility without provisions for disposing of empty bags, drums or barrels by an acceptable procedure that will minimize operator exposure to dusts, 2 points shall be assessed. R309-525-11(6)(b) and (c).

(q) For a treatment facility that does not provide cross connection control on the make-up waterlines discharging to solution tanks, 10 points shall be assessed. R309-525-11(9)(b)(i).

(r) For a treatment facility with solution tank overflow pipes that do not have a free fall discharge or are not located where noticeable, 2 points shall be assessed. R309-525-11(8)(b)(v).

(s) For a treatment facility without adequate spill containment provisions, 2 points shall be assessed. R309-525-11(6)(a)(iv)(B).

(t) For a treatment facility with acid storage tanks that are not vented to the outside atmosphere with separate screened vents, 2 points shall be assessed. R309-525-11(8)(b)(vi).

(u) For a treatment facility without provisions for the proper disposal of water treatment plant waste (such as sanitary, laboratory, sludge, and filter backwash water), 5 points shall be assessed. R309-525-23.

(v) For a treatment facility where cross connection control is not provided on the feed lines to the solution tanks, 10 points shall be assessed. R309-525-11(9)(b) and (c).

(w) For a treatment facility that does not have a means to measure water flow rate, 10 points shall be assessed.

(x) For a surface water treatment facility where the piping is not labeled and color coded to identify the direction of flow and the contained liquid, 2 points shall be assessed. R309-525-8.

(y) Treatment facilities not secured against unauthorized access, 20 points shall be assessed.

(z) For a treatment facility using expired chemical reagents for process control, 5 points shall be assessed.

(aa) For a treatment facility with no access to lab or test kits for process testing, 2 points shall be assessed. R309-525-17(1).

(bb) For a treatment facility lacking cross connection control for the in-plant water supply, 10 points shall be assessed. R309-525-11(9)(b)

(2) Disinfection.

(a) General.

(i) For a chlorination facility which is not heated, lighted or ventilated as necessary to assure proper operation or the equipment and serviceability, 2 points shall be assessed. R309-520-7(1)(l).

(ii) For a disinfection facility without cross connection control on the solution feeders into the process units as

required in R309-525-11(9)(c), 10 points shall be assessed. R309-525-11(9)(b)(ii).

(iii) For a chlorination facility where there is no standby disinfection equipment of sufficient capacity available to replace the largest unit, 10 points shall be assessed. R309-520-7(1)(k).

(iv) For a disinfection facility where the correct reagent is not used for testing free disinfectant residual, 2 points shall be assessed.

(v) For a treatment facility where the pre- and post-chlorination processes are not independent of each other, to prevent possible siphoning of partially treated water into the clear well, 50 points shall be assessed. R309-525-11(9)(b)(iv).

(vi) For a disinfection facility where chemical solution tanks are not kept covered, 2 points shall be assessed. R309-525-11(8)(b)(iii).

(vii) For a disinfection facility without disinfectant residual test equipment, 2 points shall be assessed. R309-520-7(1)(j).

(viii) For a disinfection facility where there is no means to measure the volume of water treated, 2 points shall be assessed. R309-520-7(1)(i).

(b) Gas chlorination.

(i) For a gas chlorination facility without an automatic switch over of chlorine cylinders to assure continuous disinfection, 2 points shall be assessed. R309-520-7(2)(a).

(ii) For a gas chlorination facility without scales for weighing cylinders, 2 points shall be assessed. R309-520-7(2)(k).

(iii) For a gas chlorination facility without a leak repair kit, 15 points shall be assessed. R309-520-7(2)(p).

(iv) For a gas chlorination facility without respiratory equipment available and stored at a convenient location, 5 points shall be assessed. R309-520-7(2)(o).

(v) For a gas chlorination facility housed in a water treatment plant building where the chlorine gas feed and storage area is not enclosed and separated from other operating areas, 2 points shall be assessed. R309-520-7(2)(h).

(vi) For a gas chlorination facility where the chlorination equipment rooms are not vented such that the ventilating fan(s) take suction near the floor, as far as practical from the door and air inlet, with the point of discharge so located as not to contaminate air inlets of any rooms or structures, 5 points shall be assessed. R309-520-7(2)(e)(ii).

(vii) For a gas chlorination facility where the chlorination equipment rooms are not vented such that air inlets are through louvers near the ceiling, 2 points shall be assessed. R309-520-7(2)(e)(iii).

(viii) For a gas chlorination facility where the chlorination equipment rooms are not vented such that separate switches for the fans and lights are outside of the chlorine room, at the entrance to the chlorination equipment room and protected from vandalism, 2 points shall be assessed. R309-520-7(2)(e)(v).

(ix) For a gas chlorination facility where the vent hose from the feeder to discharge to the outside atmosphere is not above grade or does not have the end covered with #14 non-corrodible mesh screen, 2 points shall be assessed. R309-520-7(2)(f).

(x) For a gas chlorination facility without a bottle of ammonium hydroxide (56%) available for leak detection, 2 points shall be assessed. R309-520-7(2)(p).

(xi) For a gas chlorination facility where full and empty cylinders of chlorine gas are not restrained in position to prevent upset, 2 points shall be assessed. R309-520-7(2)(i)(ii).

(xii) For a gas chlorination facility with full and empty cylinders of chlorine gas stored in areas in direct sunlight or exposed to excessive heat, 2 points shall be assessed. R309-520-7(2)(i)(iii).

(xiii) For a gas chlorination facility in a water treatment plant building where the chlorine room is constructed in a manner that any openings between the chlorine room and the remainder of the plant are not sealed, 2 points shall be assessed. R309-520-7(2)(h)(ii).

(xiv) For a gas chlorination facility housed in a water treatment plant building that lacks outward-opening doors with panic bars, 2 points shall be assessed. R309-520-7(2)(h)(iii).

(xv) For a gas chlorination facility housed in a water treatment plant building with floor drains that do not discharge to the outside of the building and are not connected to other internal or external drain systems, 5 points shall be assessed. R309-520-7(2)(h)(iv).

(xvi) For a gas chlorination facility without a means of chlorine leak detection, such as a bottle of ammonia hydroxide solution or chlorine leak detection equipment, 15 points shall be assessed. R309-520-7(2)(p).

(c) Chlorine dioxide.

(i) For a chlorine dioxide disinfection facility where provisions are not made for proper storage of sodium chlorite to eliminate any danger of explosion 2 points shall be assessed. R309-520-10(3)(b) and R309-525-11(11)(b)(i).

(ii) For a chlorine dioxide disinfection facility where sodium chlorite is not stored by itself in a separate room and away from organic materials that would react violently with sodium chlorite, 2 points shall be assessed. R309-520-10(5)(a) and R309-525-11(11)(b)(i)(A).

(iii) For a chlorine dioxide disinfection facility where sodium chlorite storage structures are not constructed of noncombustible materials, 2 points shall be assessed. R309-520-10(3)(b)(iv) and R309-525-11(11)(b)(i)(B).

(iv) For a chlorine dioxide disinfection facility where a sodium chlorite storage structure is not located in an area where a fire may occur, water should be available to keep the sodium chlorite area sufficiently cool to prevent decomposition from heat and resultant potential explosive conditions. 2 points shall be assessed if this is not the case. R309-520-10(4)(d) and R309-525-11(11)(b)(i)(C).

(v) For a chlorine dioxide disinfection facility that stores combustible or reactive materials in the operating area, 2 points shall be assessed. R309-520-10(5)(a).

(vi) For a chlorine dioxide disinfection facility that does not store personal protective equipment nearby, 5 points shall be assessed. R309-520-10(5)(c).

(vii) For a chlorine dioxide disinfection facility that does not have an emergency eyewash and shower immediately outside the operating area, 2 points shall be assessed. R309-520-10(3)(b)(viii).

(viii) For a chlorine dioxide disinfection facility that lacks an emergency shutoff for flows to the chlorine dioxide generator, 2 points shall be assessed. R309-520-10(3)(b)(ix).

(ix) For a chlorine dioxide disinfection facility that lacks a distinguishable alarm triggered by an ambient air chlorine dioxide sensor, 2 points shall be assessed. R309-520-10(3)(b)(v).

(x) For a chlorine dioxide disinfection facility that lacks wash down water available in the operating area, 2 points shall be assessed. R309-520-10(3)(b)(xvi).

(xi) For a chlorine dioxide disinfection facility that does not maintain the temperature of the chlorine dioxide operating area between 60 and 100°F, 2 points shall be assessed. R309-520-10(5)(d).

(xii) For a chlorine dioxide disinfection facility that lacks an Operation and Maintenance Manual including safety

and emergency response procedures, 2 points shall be assessed. R309-520-10(5)(f).

(d) Ultraviolet (UV)

(i) For a UV disinfection facility that lacks an operating procedure in place to handle UV lamp breakage, power supply interruption, response to alarms, 2 points shall be assessed. R309-520-8(4)(b).

(ii) For a UV disinfection facility that does not calibrate and operate UV intensity sensors per manufacturer's instruction, 2 points shall be assessed R309-520-8(4).

(iii) For a UV disinfection facility that does not use ANSI/NSF Standard 60 chemicals in the cleaning of the UV, 25 points shall be assessed. R309-520-8(3)(j).

(iv) For a UV disinfection facility that can't isolate the UV disinfection system or each UV reactor for maintenance, 2 points shall be assessed. R309-520-8(3)(g).

(v) For a UV disinfection facility that lacks a backup power source for the UV disinfection system, 2 points shall be assessed. R309-520-8(3)(l).

(vi) For a UV disinfection facility that lacks a redundant primary disinfection mechanism, 5 points shall be assessed. R309-520-8(3)(m).

(e) Ozone

(i) For an ozone disinfection facility without a minimum of two ozone aqueous residual analyzers, 2 points shall be assessed. R309-520-9(7)(c).

(ii) For an ozone disinfection facility using chemicals that do not meet ANSI/NSF Standard 60 quench the residual ozone, 25 points shall be assessed. R309-520-9(4)(h).

(iii) For an ozone disinfection facility lacking properly functioning ozone off-gas blowers from the contactor, 2 points shall be assessed. R309-520-9(5)(b).

(iv) For an ozone disinfection facility that lacks a system for treating the final off-gas from each ozone contactor, 2 points shall be assessed. R309-520-9(5)(a).

(v) For an ozone disinfection facility discharging an ozone concentration in the gas discharge exceeding 0.1 ppm by volume, 2 points shall be assessed. R309-520-9(5)(d).

(3) Fluoridation.

(a) General

(i) For a fluoridation facility that does not calculate fluoride concentrations, including chemical dosages and total water quantities daily, 2 points shall be assessed. R309-105-14(3).

(ii) For a fluoridation facility without a fail-safe device incorporated in the fluoride feed control system to prevent overfeeding fluoride, 30 points shall be assessed. R309-535-5(3).

(iii) For a fluoridation facility that uses fluoride chemicals that do not conform to the applicable AWWA standards or with ANSI/NSF Standard 60, 25 points shall be assessed. R309-535-5.

(iv) For a fluoridation facility without scales, loss-of-weight recorders or liquid level indicators, as appropriate, 2 points shall be assessed. R309-535-5(2)(a).

(v) For a fluoridation facility without proper personal protective equipment as required in R309-525-11(10) for operators handling fluoride compounds, 10 points shall be assessed. R309-535-5(4).

(vi) For a fluoridation facility lacking a sampling location for measuring the final fluoride level, 2 points shall be assessed. R309-525-18.

(vii) For a fluoridation facility that does not have a means to measure the flow of water to be treated, 2 points shall be assessed. R309-535-5(2)(g).

(viii) For a fluoridation facility without fluoride testing equipment not properly verified or calibrated, 2 points shall be assessed. R309-525-25(4).

(ix) For a fluoride facility adding fluoride compound

before lime-soda softening, 2 points shall be assessed. R309-535-5(2)(c).

(x) For a Fluoridation facility lacking cross connection control so that no direct connections exist between any sewer and a drain or overflow from the feeder, solution chamber or tank, 10 points shall be assessed. R309-525-11(9)(b)(iii).

(xi) For a fluoridation facility storing incompatible chemicals in the fluoride storage or injection areas, 10 points shall be assessed. R309-525-11(7)(a)(iv).

(xii) For a fluoridation facility lacking a floor drain to facilitate the washdown of floors, 2 points shall be assessed. R309-535-5(5)(b)

(b) Acid

(i) For a fluoridation facility without deluge showers and eye wash devices, 10 points shall be assessed. R309-535-5(4).

(ii) For a fluoridation facility lacking adequate spill containment provisions, 2 points shall be assessed R309-525-11(6)(a)(iv)(B).

(iii) For a fluoridation facility lacking a vent in the fluorosilicic acid storage units that vents to the atmosphere, 2 points shall be assessed. R309-525-11(8)(b)(vi).

(c) Dry

(i) For a fluoridation facility where the make-up water used for sodium fluoride dissolution is not treated to reduce hardness to less than 75 mg/l as calcium carbonate, 2 points shall be assessed. R309-535-5(2)(i).

(ii) For a fluoridation facility without a spring opposed diaphragm type anti-siphon device for all fluoride feed lines and dilution water lines, 10 points shall be assessed. R309-535-5(2)(f).

(iii) For a fluoridation facility with saturators that do not have a flow meter on the inlet or outlet line, 2 points shall be assessed. R309-535-5(2)(l).

(iv) For a fluoridation facility without an adequate level of fluoride crystals in the saturator, 2 points shall be assessed. R309-525-11(8)(b)(i).

(v) For a fluoridation facility without a NIOSH/MSHA certified dust respirator approved for fluoride dust removal as required in R309-525-11(10) for operators handling dry fluoride compounds, 10 points shall be assessed. R309-535-5(4).

(vi) For a fluoridation facility where an overflow from the day tank will not drain by gravity back into the bulk storage tank or a containment system, 10 points shall be assessed. R309-525-11(8)(c)(v).

(vii) For a fluoridation facility using the sodium fluoride dry chemical where the saturators are not of the up-flow type, 2 points shall be assessed. R309-535-5(2)(l).

(viii) For a fluoride facility where fluoride chemicals stored in uncovered or opened shipping containers and are stored inside a building on pallets, 2 points shall be assessed. R309-535-5(1).

(ix) For a fluoride feed pump that is not tied directly to the well pump or service pump, 30 points shall be assessed. R309-535-5(2)(k).

(x) For a fluoridation facility lacking a vent in the dry chemical storage areas that vents to the atmosphere outside the building, 2 points shall be assessed. R309-535-5(5)(a).

(xi) For a fluoridation facility using sodium fluoride dry chemical and lacking a hopper equipped with an exhaust fan and dust filter and under a negative pressure during transfer of dry fluoride compounds, 10 points shall be assessed. R309-535-5(5)(a).

(xii) For a fluoridation facility that does not vent air from fluoride handling equipment through a dust filter to the outside atmosphere of the building for dust control during transfer of dry fluoride compounds, 10 points shall be assessed. R309-535-5(5)(a).

(xiii) For a fluoridation facility using sodium fluoride dry chemical and lacking a means of disposing of empty bags, drums or barrels handled in a manner that minimizes operators' exposure to fluoride dusts shall be assessed, 10 points. R309-535-5(5)(b).

(4) Filtration Treatment.

(a) For a filtration facility that does not have equipment for each individual filter to continuously monitor the effluent turbidity, 30 points shall be assessed.

(b) For a surface water filtration facility that does not have at least two filter units, each capable of meeting the plant design capacity, 20 points shall be assessed. R309-525-15(3).

(c) For a conventional surface water filtration facility that does not have the ability to filter to waste (to allow a filter to ripen before introduction finished water into the clearwell), 20 points shall be assessed.

(d) For a filtration facility where instrumentation and controls are inoperable, 2 points shall be assessed.

(e) For a filtration facility where a backwash tank is not provided with finished drinking water, 20 points shall be assessed. R309-525-15(7)(a)(ix).

(f) For a conventional surface water filtration facility where the backwash waste water is not settled prior to being recycled to the head of the treatment plant, 2 points shall be assessed. R309-525-15(7)(a).

(g) For a membrane filtration facility where automatic membrane integrity tests are not performed at least daily, 2 points shall be assessed. R309-530-8(3)(b).

(h) For a membrane filtration facility not using ANSI/NSF 60 approved chemicals, 25 points shall be assessed. R309-525-11(5)(b).

(i) For a membrane filtration facility lacking cross-connection control protection for the treatment process, 10 points shall be assessed.

(5) Ion Exchange

(a) For an ion exchange facility without a depth of the exchange resin at least 3 feet, 2 points shall be assessed. R309-535-8(1)(b)(iii).

(b) For an ion exchange facility using a salt for the brine solution not having an ANSI/NSF 60 certification, 25 points shall be assessed. R309-525-11(5)(b).

(c) For an ion exchange facility make-up water inlet that lacks protection from back-siphonage, 2 points shall be assessed

(d) For an ion exchange facility where the overflow discharge piping is not protected with a corrosion resistant screen or is not terminated with a downturned bend with adequate clearance to prevent cross connection, 10 points shall be assessed. R309-525-11(9)(b).

(e) For an ion exchange facility that lacks a brine measuring tank or means of metering provided to obtain proper dilution, 2 points shall be assessed. R309-525-11(8)(b)(i).

(6) Sequestration

(a) For a polyphosphate sequestration facility that uses chemicals not meeting ANSI/NSF 60 certification, 25 points shall be assessed. R309-535-11(5)(d).

(b) For a sequestration facility using phosphate chemicals where total phosphate applied exceed 10 milligrams per liter as PO₄, 2 points shall be assessed. R309-535-11(5)(b).

(c) For a sequestration facility that lacks sample taps located on each raw water source, each treatment unit influent and each treatment unit effluent, 2 points shall be assessed. R309-535-11(5)(d).

(d) For a sequestration facility that lacks the testing equipment for accurately measuring the phosphate dosage, 2 points shall be assessed. R309-535-11(5).

R309-400-8. Operator Certification.

- (1) A water system that is required to have a certified operator and does not, 30 points shall be assessed.
- (2) A water system where the operator is not certified at the appropriate level, 10 points shall be assessed.
- (3) A grade 3 or 4 water system that does not have all direct responsible charge operators (as specified in R309-300-5(5)) certified at the level of the system, 5 to 15 points shall be assessed. The number of points shall be based on the percentage of time that the water system is operated by operators not certified at the required level.
- (4) A water system where the certified operator does not live within a one hour response time, 20 points shall be assessed.
- (5) A water system may be credited up to a maximum of 20 points, which shall remain on record for as long as the conditions apply. The following items are eligible for credit:
 - (a) A water system that is not required to have a certified operator and does shall be credited 10 points.
 - (b) A water system that has operators that are certified at a higher level than required shall be credited 10 points.
 - (c) A water system that has operators certified in other areas that are not required by that water system, such as treatment shall be credited 10 points.

R309-400-9. Cross Connection Control Program.

- (1) A water system, which does not have any of the below listed components of a cross connection control program in place, 50 points shall be assessed.
- (2) A water system, which only has some of the components of a cross connection control program in place, shall be assessed the following number of points:
 - (a) A water system which does not have local authority to enforce a cross connection control program (e.g., ordinance, bylaw or policy), 10 points shall be assessed.
 - (b) A water system that does not provided public education or awareness material or presentations on an annual basis, 10 points shall be assessed.
 - (c) A water system that does not have an operator with training in the area of cross connection control or backflow prevention, 10 points shall be assessed.
 - (d) A water system with no written records of cross connection control activities, such as, backflow assembly inventory and test history, 10 points shall be assessed.
 - (e) A water system that does not have on-going enforcement activities (hazard assessments and enforcement actions), 10 points shall be assessed.

R309-400-10. Drinking Water Source Protection.

Drinking water source protection (for ground water and surface water sources): Points shall be assessed for each source after a system fails to complete source protection requirements according to schedules or deadlines specified in R309-600 and R309-605, unless extensions have been requested from and granted by the Director. The points shall remain until such time as the violation or deficiency is corrected or resolved.

- (1) For a water system that has not appointed a designated person for source protection and notified the Division, 5 points shall be assessed.
- (2) For a water system that has not upgraded a Preliminary Evaluation Report to a Drinking Water Source Protection plan, 30 points shall be assessed.
- (3) For a water system that has not submitted an updated Drinking Water Source Protection plan, 10 points shall be assessed.
- (4) For a water system with any new (see R309-110) sources for which a Preliminary Evaluation Report has not been submitted, 150 points shall be assessed. These points

shall be included with the points for an unapproved source, not added to them.

- (5) For a water system that has any existing (see R309-110) sources that have come into use for which a source protection plan has not been submitted, 30 points shall be assessed.
- (6) For a water system that has reconstructed or redeveloped a water source and has not submitted a revised source protection plan, 20 points shall be assessed.
- (7) For a water system that has a disapproved plan, update or Preliminary Evaluation Report, 20 points shall be assessed.

R309-400-11. Administrative Issues.

Points in this area shall be assessed at the time that the failure occurs or upon notification of the Director, and shall remain until the issue is resolved unless otherwise specified.

- (1) Administrative Data -
 - (a) A water system, that has not designated a person or organizational official responsible for the system including a current address and phone number, 10 points shall be assessed.
 - (b) A water system project constructed without proper plan approval, 50 to 200 points shall be assessed based on an evaluation of the project which shall include the structural or engineering integrity of the project; whether the plans and specifications were prepared and stamped by a licensed professional engineer; the adequacy of the materials used and the impact on the operation of the water system (good or bad).
 - (2) A water system with a current written Emergency Response Program shall be credited 10 points that shall remain on record as long as the Program remains current.
 - (3) A water system with a written Financial Management Plan including an appropriate rate structure, infra-structure replacement fund, and master plan shall be credited 10 points that shall remain on record as long as the Plan is current.
 - (4) Sampling Site Plans:
 - (a) A water system, which does not have an adequate bacteriological sampling site plan, 5 points shall be assessed.
 - (b) A water system, which does not have a lead/copper sampling site plan, 10 points shall be assessed.
 - (5) Customer Complaint:
 - (a) 25 to 100 points may be assessed for valid and documented customer complaints. The customer complaints include but are not limited to the following:
 - (i) Turbidity;
 - (ii) Pressure;
 - (iii) Taste and Odor;
 - (iv) Sickness (water suspected); and
 - (v) Waterborne Disease Outbreak (R309-104-9).
 - (vi) Periods of Water Outage
 - (b) The number of points shall be based upon the extent and documentation of the problem and the potential impact to public health. The documentation shall consist of an investigation by Department of Environmental Quality, Department of Health or Local Health Department personnel and may include an epidemiological study linking the drinking water to reported outbreaks of illness where appropriate.
 - (c) In the case of a documented waterborne disease outbreak, the water system shall automatically be rated Not Approved for at least the duration of the threat to the quality of the drinking water and as long as it takes the water system to correct any deficiency that caused the outbreak.
 - (d) Points shall only be assessed once per issue and shall not be additive based on the number of calls per issue. These points shall be assessed and updated upon verification

of the complaint by the Director and shall remain on record until the issue or deficiency no longer exists. Points may have already been assessed in other areas as appropriate.

November 17, 2014

19-4-104

Notice of Continuation March 13, 2015

(6)(a) The Director may issue directives to a water system that include, but are not limited to the following:

- (i) Administrative Orders;
- (ii) Rule defined action;
- (iii) Rule defined compliance schedule;
- (iv) Variance/Exemption requirements;
- (v) Bilateral Compliance Agreement;
- (vi) Notice of Violation and Compliance Order; and
- (vii) Compliance Action/Enforcement Order.

(b) If the water system does not comply with the directive, the Director may assess 25 to 200 points to the water system. Points shall be assessed based upon the severity of the non-compliance, the threat to public health and the underlying basis for the original directive.

(7) Data Falsification - The Director may assess a water system points for data falsification. The water system may be assessed 25 to 200 points for each occurrence based upon:

- (a) the severity of the falsification;
- (b) the threat to public health;
- (c) the intent of the water system personnel; and,
- (d) the type of falsification.
- (i) Reports only good data
- (ii) Doctored results from the laboratory
- (iii) Non-valid sample

Data reported to the Director includes but is not limited to Water Treatment Plant Reports, Disinfection Reports, bacteriological and chemical analyses, and Annual Reports. This assessment of points shall be in addition to any other penalty provided by law.

(8) Water Hauling:

(a) For a community water system that is hauling water as a permanent method of culinary water distribution, 150 points shall be assessed. R309-550-10(1).

(b) For a non-community system that is hauling water as a permanent method of culinary water distribution without approval from the director, 150 points shall be assessed. R309-550-10(2).

(c) For a water system, which has been granted an exception to haul water, if any part of the water hauling guidelines is not followed, 50 points shall be assessed. R309-550-10.

R309-400-12. Reporting and Record Maintenance Issues.

Points may be assessed for failure to provide required reports to the Director by the reporting deadline. The points shall be assigned as the failure occurs and shall remain on record for a period of one year.

(1) Monthly Reports:

(a) For each failure to report the monthly water treatment plant report, 100 points shall be assessed.

(2) Quarterly Reports:

(a) For each failure to report the quarterly disinfection report, 50 points shall be assessed.

(3) Annual Reports:

(a) For failure to provide the annual report, 2 points shall be assessed.

(b) Community water systems that fail to send a certification to the Division stating how the consumer confidence report was distributed to its customers as required in R309-225-7(3), 10 points shall be assessed.

(c) Community water systems that fail to mail a copy of the consumer confidence report to the Division as required in R309-225-7(3), 10 points shall be assessed.

KEY: drinking water, environmental protection, water system rating, penalties

R309. Environmental Quality, Drinking Water.**R309-405. Compliance and Enforcement: Administrative Penalty.****R309-405-1. Authority.**

Utah Code Annotated, Sections 19-4-104 and 19-4-109

R309-405-2. Purpose, Scope, and Applicability.

(1) This rule sets the criteria and procedures the Director will use in assessing penalties to public drinking water systems for violation of its rules.

(2) This guidance and ensuing criteria is intended to be flexible and liberally construed to achieve a fair, just, and equitable result with the intent of returning a public water system to compliance.

(3) This rule is applicable to all public drinking water systems.

R309-405-3. Limits on Authority and Liability.

Nothing in this rule should be construed to limit the Director's ability to take enforcement actions under Utah Code Annotated, Section 19-4-109.

R309-405-4. Assessment of a Penalty and Calculation of Settlement Amounts.

(1) Where the Director determines that a penalty may be appropriate, the Director shall propose a penalty amount by sending a notice of agency action to the public water system. The notice of agency action shall provide that the public water system may submit comments and/or information on the proposed penalty to the Director within 30 days. The criteria the Director will use in establishing a proposed penalty amount shall be as follows:

(a) Major Violations: \$600 to \$1000 per day for each day of violation. This category includes violations with high potential for impact on drinking water users, major deviations from the requirements of the rules or Safe Drinking Water Act, intentional fraud, falsification of data, violations which result in a public water system being considered by the Environmental Protection Agency to be: "Significant Non-Compliers" (SNC), or violations that may have a substantial adverse effect on the regulatory program. Specific violations that are subject to a major violation category can include the following:

(i) Violations subject to \$1000 per day penalty:

(A) Any violation defined by R309-220-5 which would trigger a Tier 1 public notification.

(B) Not having any elements of a source protection plan as required in R309-600 for ground water sources and R309-605 for surface water sources.

(C) Failure to respond to an Administrative Order issued by the Director.

(D) Introduction by the water system of a source water that has not been evaluated and approved for use as a public drinking water source under R309-515.

(E) Construction or use of an interconnection to another public water system which has not been reviewed and approved in accordance with R309-550-9.

(F) Having over 20 IPS points (Improvement Priority System points based on R309-400, the Water System Rating Criteria) specifically for operating pressures below that required by R309-105-9.

(G) Having 50 IPS points specifically for an inadequate well seal as required in R309-515.

(H) Having over 50 IPS points (not including the deficiencies in (F) and (G) above) specifically assessed in the physical facility section of an IPS report.

(I) Use of a surface water source without proper filtration treatment in accordance with R309-525 or 530.

(J) Exceeding the rated water treatment plant capacity as

determined by review under R309-525 or 530.

(K) Insufficient disinfection contact time as evaluated under R309-215-7.

(ii) Violations subject to \$800 per day penalty:

(A) Not having any of the required components of a cross connection control program in place as required by R309-105-12.

(B) Any violation of the turbidity requirements outlined in R309-215-9(4)(b)(iii -iv) for individual filter turbidities using consecutive readings taken 15 minutes apart.

(b) Moderate Violations: \$400 to \$600 per day for each day of violation. This category includes violations with a moderate potential for impact on drinking water users, moderate deviations from the requirements of the rules or Safe Drinking Water Act with some requirements implemented as intended, or violations that may have a significant notable adverse effect on the regulatory program. Specific violations that are subject to a moderate violation category can include the following:

(i) Violations subject to \$600 penalty:

(A) Any violation defined by R309-220-6 which would trigger a Tier 2 public notification.

(B) Having a disapproved status on a source protection plan (R309-600 and 605) for a period longer than 90 days.

(C) Installation or use of disinfection equipment that has not been evaluated and approved for use under R309-520.

(D) Having measured turbidity spikes of greater than 0.5 or 1.0 NTU in two consecutive fifteen minute readings as defined in R309-215-9(4)(b)(i) or (ii) respectively.

(E) Insufficient source capacity, storage capacity, or delivery capacity as established by review of the system design under R309-500 through 550.

(F) Not complying with plan approval requirements as set forth in R309-500. The term infrastructure can include the disinfection process, surface water treatment process, and physical facilities such as water treatment plants, storage reservoirs, sources and distribution piping.

(c) Minor Violations: Up to \$400 per day for each day of violation. This category includes violations with a minor potential for impact on drinking water users, slight deviations from the rules or Act with most of the requirements implemented, or violations that may have a minor adverse effect on the regulatory program. Specific violations that are subject to a minor violation category can include the following:

(i) Violations subject to \$400 per day penalty:

(A) Any violation defined by R309-220-7 which would trigger a Tier 3 public notification or a violation of the monitoring requirements of R309-515-4(5), except for turbidity monitoring for surface water treatment facilities and violations termed as minor monitoring as outlined in R309-400-3 (minor bacteriological routine monitoring violation, minor bacteriological repeat monitoring violation and minor chemical monitoring violation).

(B) Failure to upgrade a Preliminary Evaluation Report for a source protection plan as required in R309-600 and 605.

(C) Failure to update a source protection plan as required in R309-600 and 605.

(D) Construction or use of a storage reservoir that has not been evaluated for use under R309-545.

(ii) Violations subject to \$200 per day penalty:

(A) Lacking individual components of a cross connection control program as required by R309-105-12.

(B) Not having a certified operator on staff as required in R309-300-5(10) after 1 year or 4 operator certification exam cycles.

(C) Any minor monitoring violation as defined by R309-400-3 (minor bacteriological routine monitoring violation, minor bacteriological repeat monitoring violation and minor

chemical monitoring violation).

(D) Any violation of the turbidity requirements outlined in R309-215-9(4)(b)(i-ii) for individual filter turbidities using consecutive readings taken 15 minutes apart.

(2) The Director will assess the penalty, if any, after reviewing information submitted by the public water system. The public water system may appeal the assessment of the penalty as provided in R305-7-302.

R309-405-5. Factors for Seeking or Negotiating Amount of Penalties.

The Director, in assessing the penalty, may take into account the following factors:

(1) Economic benefit. The costs a person or organization may save by delaying or avoiding compliance with applicable laws or rules.

(2) Gravity of the violation. This component of the calculation shall be based on:

(a) The extent of deviation from the rules;

(b) The potential for harm to drinking water users, regardless of the extent of harm that actually occurred;

(c) The degree of cooperation or noncooperation and 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;

(d) History of compliance or noncompliance. The penalty amount may be adjusted upward in consideration of previous violations and the degree of recidivism. Likewise, the penalty amount may be adjusted downward when it is shown that the violator has a good compliance record; and,

(e) Degree of willfulness or negligence. Factors to be considered include how much control the violator had over the violation 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, or should have known, of the legal requirements which were violated, and degree of recalcitrance.

(3) The number of days of non compliance

(4) Public sensitivity. The actual impact of the violation(s) that occurred.

(5) Response and investigation costs incurred by the State and others.

(6) The possible deterrent effect of a penalty to prevent future violations.

R309-405-6. Satisfaction of Penalty Under Stipulated Penalty Agreement.

The Director may accept the following methods of payment or satisfaction of a penalty to promote compliance and to achieve the purposes set forth in Utah Code Annotated Section 19-4-109:

(1) Payment of the penalty may be extended based on a person or organization's inability to pay. This shall be distinguished from an unwillingness to pay. In cases of financial hardship, the Director may accept payment of the penalty under an installment plan or delayed payment schedule with interest.

(2) In circumstances where there is a demonstrated financial hardship, the Director may allow a portion of the penalty to be deferred and eventually waived if no further violations are committed within a period designated by the Director.

(3) In some cases, the Director may allow the violator to satisfy the penalty by completing a Supplemental Environmental Project (SEP) approved by the Director. The following criteria shall be used in determining the eligibility of such projects:

(a) The project must be in addition to all regulatory compliance obligations;

(b) The project must relate to some or all of the issues of the violation;

(c) The project must primarily benefit the drinking water users;

(d) The project must be defined, measurable and have a beginning and ending date;

(e) The project must be agreed to in writing between the public water system and the Director;

(f) The project must not generate the public perception favoring violations of the laws and rules.

R309-405-7. Penalty Policy for Civil Proceedings.

Pursuant to Utah Code Annotated Section 19-4-109(2)(b), any person who willfully violates any rule or order made or issued pursuant to the Utah Safe Drinking Water Act, Utah Code Annotated Section 19-4-101 et seq. is subject to a civil penalty of not more than \$5000 per day for each day of violation. The Director shall apply the provisions of R309-405-4, 5, and 6 in pursuing or resolving willful violations except that the penalty range per day for each day of violation for major violations shall be \$3000 to \$5000, for moderate violations shall be \$2000 to \$3000, and for minor violations shall be up to \$2000.

KEY: drinking water, environmental protection, penalties
October 12, 2013
Notice of Continuation March 13, 2015
19-4-104

R309. Environmental Quality, Drinking Water.
R309-500. Facility Design and Operation: Plan Review, Operation and Maintenance Requirements.
R309-500-1. Purpose.

The purpose of this rule is to describe plan review procedures and requirements, clarify projects requiring review, and inspection requirements for drinking water projects. It is intended to be applied in conjunction with rules R309-500 through R309-550. Collectively, these rules govern the design, construction, operation and maintenance of public drinking water system facilities. These rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water which consistently meet applicable drinking water quality requirements and do not pose a threat to general public health.

R309-500-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-500-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-500-4. General.

(1) Construction and Operation of New Facilities.

As authorized in 19-4-106(3) of the Utah Code, the Director may review plans, specifications, and other data pertinent to proposed or expanded water supply systems to insure proper design and construction.

Plans and specifications and a business plan as required by R309-800-5, along with a completed project notification form, shall be submitted to the Director for any new water systems or previously un-reviewed water systems unless acceptable data can be presented that the proposed or existing water system will not become a "public water system" as defined in 19-4-102 of the Utah Code or in R309-110.

Construction of new facilities for public water systems or existing facilities of previously un-reviewed public drinking water systems shall conform to rules R309-500 through R309-550; the "Facility Design and Operation" rules. There may be times in which the requirements of the Facility Design and Operation rules are not appropriate. Thus, the Director may grant an "exception" to the Facility Design and Operation rules if it can be shown that the granting of such an exception will not jeopardize the public health.

Construction of a public drinking water project shall not begin until complete plans and specifications have been approved in writing by the Director unless waivers have been issued as allowed by R309-500-6(3). This approval shall be referred to as the Plan Approval.

Furthermore, no new public drinking water facility shall be put into operation until written approval to do so has been given by the Director or this requirement waived. This approval is referred to as the Operating Permit.

(2) Existing Facilities.

All existing public drinking water systems shall be capable of reliably delivering water which meets the minimum current standard of drinking water quantity and quality requirements. The Director may require modification of existing systems in accordance with R309-500 through R309-550 when such modifications are needed to reliably achieve minimum quantity and quality requirements.

(3) Operation and Maintenance of Existing Facilities.

Public drinking water system facilities shall be operated and maintained in a manner which protects the public health.

As a minimum, the operation and maintenance procedures of R309-500 through R309-550 shall be adhered to.

R309-500-5. Public Drinking Water Project.

(1) Definition.

A public drinking water project, requiring the submittal of a project notification form along with plans and specifications, is any of the following:

(a) The construction of any facility for a proposed drinking water system (see 19-4-106(3) of the Utah Code or R309-500-4(1) above describing the authority of the Director).

(b) Any addition to, or modification of, the facilities of an existing public drinking water system which may affect the quality or quantity of water delivered.

(c) Any activity, other than on-going operation and maintenance procedures, which may affect the quality or quantity of water delivered by an existing public drinking water system. Such activities include:

(i) the interior re-coating or re-lining of any raw or drinking water storage tank, or water storage chamber within any treatment facility,
(ii) the "in-situ" re-lining of any pipeline,
(iii) a change or addition of any primary coagulant water treatment chemical (excluding filter, flocculent or coagulant aids) when the proposed chemical does not appear on a list of chemicals pre-approved by the Director for a specific treatment facility, and
(iv) the re-development of any spring or well source or replacement of a well pump with one of different capacity.

(2) On-going Operation and Maintenance Procedures.

On-going operation and maintenance procedures are not considered public drinking water projects and, accordingly, are not subject to the project notification, plan approval and operating permit requirements of this rule. However, these activities shall be carried out in accordance with all operation and maintenance requirements contained in R309-500 through R309-550 and specifically the disinfection, flushing and bacteriological sampling and testing requirements of ANSI/AWWA C651-05 for pipelines, ANSI/AWWA C652-02 for storage facilities, and ANSI/AWWA C654-03 for wells before they are placed back into service. The following activities are considered to be on-going operation and maintenance procedures:

(a) pipeline leak repair,
(b) replacement of existing deteriorated pipeline where the new pipeline segment is the same size as the old pipeline or the new segment is upgraded to meet the minimum pipeline sizes required by R309-550-5(4) or larger sizes as determined by a hydraulic analysis in accordance with R309-550-5(3),
(c) tapping existing water mains with corporation stops so as to make connection to new service laterals to individual structures,
(d) distribution pipeline additions where the pipeline size is the same as the main supplying the addition or the pipeline addition meets the minimum pipeline sizes required by R309-550-5(4) or larger sizes as determined by a hydraulic analysis in accordance with R309-550-5(3), the length is less than 500 feet and contiguous segments of new pipe total less than 1000 feet in any fiscal year,
(e) entry into a drinking water storage facility for the purposes of inspection, cleaning and maintenance, and
(f) replacement of equipment or pipeline appurtenances with the same type, size and rated capacity (fire hydrants, valves, pressure regulators, meters, service laterals, chemical feeders and booster pumps including deep well pumps).

R309-500-6. Plan Approval Procedure.

(1) Project Notification.

The Division shall be notified prior to the construction of any "public drinking water project" as defined in R309-500-5(1) above. The notification may be prior to or simultaneous with submission of construction plans and specifications as required by R309-500-6(2) below. Notification shall be made by the management of the regulated public water system on a form provided by the Division. Information required by this form shall be determined by the Division and may include:

- (a) whether the project is for a new or existing public drinking water system,
- (b) the professional engineer, registered in the State of Utah, designing the project and his/her experience designing public drinking water projects within the state,
- (c) the individual(s) who will be inspecting the project during construction and whether such inspection will be full-time or part time,
- (d) whether required approvals or permits from other governmental agencies (e.g. local planning commissions, building inspectors, Utah Division of Water Rights) are awaiting approval by the Director, the agency's name and contact person,
- (e) the fire marshal, fire district or other entity having legal authority to specify requirements for fire suppression in the project area,
- (f) for community and non-transient non-community public water systems or any public water system treating surface water, the name of the certified operator who is, or will be, in direct responsible charge of the water system,
- (g) whether the water system has a registered professional engineer employed, appointed or designated as being directly responsible for the entire system design and his or her name and whether the system is requesting waiving of plan submittal under conditions of R309-500-6 (3),
- (h) the anticipated construction schedule, and
- (i) a description of the type of legal entity responsible for the water system (i.e. corporation, political subdivision, mutual ownership, individual ownership, etc.) and the status of the entity with respect to the rules of the Utah Public Service Commission.

(2) Pre-Construction Requirements.

All of the following shall be accomplished before construction of any public drinking water project commences:

- (a) Contract documents, plans and specifications for a public drinking water project shall be submitted to the Division at least 30 days prior to the date on which action is desired unless the system is eligible for and has requested waiving of plan submittal. Any submittal shall include engineering reports, pipe network hydraulic analyses, water consumption data, supporting information, evidence of rights-of-way and reference to any previously submitted master plans pertinent to the project, along with a description of a program for keeping existing water works facilities in operation during construction so as to minimize interruption of service.
- (b) Plans and specifications shall be prepared for every anticipated public water system project. The design utilized shall conform to the requirements of R309-500 through R309-550. Furthermore, the plans and specification shall be sufficiently detailed to assure that the project shall be properly constructed. Drawings shall be compatible with Division's document storage and microfilming practice. Drawings which are illegible or of unusual size shall not be accepted for review. Drawing size shall not exceed 30" x 42" nor be less than 8-1/2" x 11".
- (c) The plans and specifications shall be stamped and signed by a licensed professional engineer in accordance with Section 58-22-602(2) of the Utah Code.
- (d) Plans and specifications shall be reviewed for

conformance with R309-500 through R309-550. No work shall commence on a public water system project until a plan approval has been issued by the Director unless conditions outlined in R309-500-6(3) are met and waiving of plan submittal has been requested. If construction or the ordering of substantial equipment has not commenced within one year, a renewal of the Plan Approval shall be obtained prior to proceeding with construction.

(e) If, in the judgment of the Director, alternate designs or specific solutions can protect the public health to the same or greater extent as achieved in R309-500 through R309-550, the Director may grant an exception thereto (see the third paragraph of R309-500-4(1)).

(f) Novel equipment or treatment techniques may be developed which are not specifically addressed by these rules. These may be accepted by the Director if it can be shown that:

- (i) the technique will produce water meeting the requirements of R309-200 of these rules,
- (ii) the Director has determined that it will protect public health to the same extent provided by comparable treatment processes outlined in these rules, and
- (iii) the Director has determined the technique is as reliable as any comparable treatment process outlined in these rules.

(3) Waiving of Plan Submittal Requirement.

With identification of a professional engineer, as indicated below, on a project notification form the plan submittal requirement may be waived for certain projects. In these instances, in lieu of plans and specifications, a "certification of rule conformance" shall be submitted along with the additional information required for an operating permit (see R309-500-9), signed by the professional engineer identified to Director in (b) or, if the system has not employed, appointed, or designated such, the registered professional engineer who prepared the items in (a). Projects eligible for this waiving of plan submittal are:

- (a) distribution system improvements (excluding pressure reducing valve stations and in-line booster pump stations) which conform to a "master plan" previously reviewed and approved by the Director and installed in accordance with the system's standard installation drawings, also previously reviewed and approved by the Director, or
- (b) distribution system improvements consisting solely of pipelines and pipeline appurtenances (excluding pressure reducing valve stations and in-line booster pump stations);
 - (i) less than or equal to 4 inches in diameter in water systems (without fire hydrants) serving solely a residential population less than 3,300;
 - (ii) less than or equal to 8 inches in diameter in water systems (with fire hydrants) providing water for mixed use (commercial, industrial, agricultural and/or residential) to a population less than 3,300;
 - (iii) less than or equal to 12 inches in diameter in water systems (with fire hydrants) providing water for mixed use to a population between 3,300 and 50,000;
 - (iv) less than or equal to 16 inches in diameter in water systems (with fire hydrants) providing water for mixed use to a population greater than 50,000.

Additionally, the above systems in (b) shall employ, appoint or designate a registered professional engineer who is directly responsible for the entire public water system design and identify this individual to the Director as well as have standard installation drawings previously reviewed and approved by the Director before being eligible for waiving of plan submittal requirements.

R309-500-7. Inspection During Construction.

Staff from the Division, or the appropriate local health

department, after reasonable notice and presentation of credentials may make visits to the work site to assure compliance with these rules.

R309-500-8. Change Orders.

Any deviations from approved plans or specifications affecting capacity, hydraulic conditions, operating units, the functioning of water treatment processes, or the quality of water to be delivered, shall be reported to the Director. If deemed appropriate, the Director may require that revised plans and specifications be submitted for review. Revised plans or specifications shall be submitted to the Division in time to permit the review and Director's approval of such plans or specifications before any construction work, which will be affected by such changes, is begun.

R309-500-9. Issuance of Operating Permit.

The Division shall be informed when a public drinking water project, or a well-defined phase thereof, is at or near completion. The new or modified facility shall not be used until an "Operating Permit" is issued, in writing, by the Director. This permit shall not be issued until all of the following items are submitted and found to be acceptable for all projects with the exception of distribution lines (including in-line booster pump stations or pressure reducing stations), which may be placed into service prior to submittal of all items if the professional engineer responsible for the entire system, as identified to the Director, has received items (1) and (4):

(1) a statement from a registered professional engineer that all conditions of Plan Approval were accomplished ("certification of rule conformance"),

(2) as-built "record" drawings; unless no changes are made from previously submitted and approved plans during construction,

(3) confirmation that a copy of the as-built "record" drawings has been received by the water system owner,

(4) evidence of proper flushing and disinfection in accordance with the appropriate ANSI/AWWA Standard,

(5) where appropriate, water quality data

(6) a statement from the Engineer indicating what changes to the project were necessary during construction, and certification that all of these changes were in conformance with these rules ("certification of rule conformance"),

(7) all other documentation which may have been required during the plan review process, and

(8) confirmation that the water system owner has been provided with an Operation and Maintenance manual for the new facility.

R309-500-10. Adequacy of Wastewater Disposal.

Plans and specifications for new water systems, or facilities required as a result of proposed subdivision additions to existing water systems, shall only be approved if the method(s) of wastewater disposal in the affected area have been approved, or been determined to be feasible, by the Director of the Division of Water Quality or the appropriate local health agency.

R309-500-11. Financial Viability.

Owners of new or existing water systems are encouraged to develop realistic financial strategies for recouping the costs of constructing and operating their systems. Plans for water system facilities shall not be approved when it is obvious that public health will eventually be threatened because the anticipated usage of the system will not generate sufficient funds to insure proper operation and maintenance of the system (see also R309-352-5).

R309-500-12. Fee Schedule.

The Division may charge a fee for the review of plan and specifications. A fee schedule is available from the Division.

R309-500-13. Other Permits.

Local, county or other state permits may also be necessary before beginning construction of any drinking water project.

R309-500-14. Reference Documents.

All references made in R309-500 through R309-550 are available for inspection at the Division's office.

R309-500-15. Violations of These Rules.

Violations of rule contained in R309-500 through R309-550 are subject to the provisions of the Utah Safe Drinking Water Act (Title 19, Chapter 4 Section 109 of the Utah Code) and may be subject to fines and penalties.

KEY: drinking water, plan review, operation and maintenance requirements, permits

August 28, 2013

19-4-104

Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.
R309-505. Facility Design and Operation: Minimum Treatment Requirements.

R309-505-1. Purpose.

This rule specifies the type and degree of treatment which must be applied to the various types of water sources found in Utah. It is intended to be applied in conjunction with rules R309-500 through R309-550. Collectively, these rules govern the design, construction, operation and maintenance of public drinking water system facilities. These rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water consistently meeting applicable drinking water quality requirements and do not pose a threat to general public health.

R309-505-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-505-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-505-4. Pre-design Consultation.

The type and degree of treatment which shall be given a public drinking water source depends upon the nature of the source and the chemical and biological characteristics of the water it produces. Prior to the design of any water treatment facility, the Director shall be consulted and concur that the contemplated treatment method is appropriate for the source being treated.

R309-505-5. Drinking Water Quality Standards.

Drinking water provided for human consumption by public drinking water systems must meet all water quality standards as specified in R309-200. Sources of water which do not meet applicable standards, or may not meet such standards due to the proximity of contamination sources, shall be appropriately treated as specified herein or physically disconnected from the drinking water system.

R309-505-6. Surface Water Sources.

(1) Determination of Surface Water Source.

A surface water source is any water source which rests or travels above ground for any period of time. Such sources include rivers, streams, creeks, lakes, reservoirs, ponds or impoundments.

(2) Treatment of a Surface Water Source.

(a) As a minimum, surface water sources shall be given complete treatment as specified in R309-525 or R309-530.

(b) All surface waters shall be treated to assure:

- (i) at least 99.9 percent (3-log) removal and/or inactivation of *Giardia lamblia* cysts between a point where the raw water is not subject to re-contamination by surface water runoff and a point downstream before or at the first customer;
- (ii) at least 99.99 percent (4-log) removal and/or inactivation of viruses between a point where the raw water is not subject to re-contamination by surface water runoff and a point downstream before or at the first customer; and
- (iii) removal of substances, as needed, to comply with the quality requirements of R309-200.

(c) A public water system using a surface water source is considered to be in compliance with the requirements in subsection (b), above, if the treatment technique utilized produces water meeting the quality provisions of R309-200,

provided that all monitoring required by R309-215 has been accomplished.

R309-505-7. Low Quality Ground Water Sources.

(1) Determination of a Low Quality Ground Water Source.

(a) A low quality ground water source is any well or spring which, as determined by the Director, cannot reliably and consistently meet the drinking water quality standards described in R309-200. A water source shall be deemed to be a low quality ground water source if any of the following conditions exist:

(i) It is determined by the Director that the source is Ground Water Under the Direct Influence of Surface Water.

(A) Classification of existing ground water sources, as to whether or not they are under direct influence of surface water, shall be made by the Director.

(B) Frequent monitoring of turbidity, temperature, pH and conductivity of source water, in conjunction with similar monitoring of nearby surface waters may, if properly documented, provide sufficient evidence that the source is not influenced.

(C) Classification of existing sources shall be based upon evaluation of part or all of the following:

(I) Records review; including review of plans and specifications used for construction of collection facilities as submitted for review and approval prior to construction; review of as-built plans as submitted after construction, especially where springs are concerned; review of previous sanitary surveys; and review of any system bacteriological violations which may be linked directly to a source.

(II) Results of written survey form.

(III) On-site inspection by Division personnel.

(IV) Special tests such as Microscopic Particulate Analysis (MPA), dye tracer studies, or time of travel studies done in conjunction with the source protection program. Because of critical timing for tests such as the MPA, accelerated monitoring and reporting of water characteristics as mentioned in R309-505-7 (1)(a)(i)(B) above, may be required prior to MPA sampling.

(b) Testing for microbiological, chemical or radiologic contaminants determines that the drinking water quality requirements of R309-200 cannot be reliably or consistently met.

(c) The location, design or construction of the well or spring makes it, in the judgement of the Director, susceptible to natural or man-caused contamination.

(2) Treatment of a Low Quality Ground Water Source.

Low quality ground water sources shall be treated to assure that all chemical and biological contaminants are reduced to the levels which are reliably and consistently below MCL's prescribed in R309-200. If a source is determined to be ground water under the direct influence of surface water the following is required:

(a) Upon determination that a ground water source is under the direct influence of surface water, conventional surface water treatment, as specified in R309-525, or an approved equivalent, as specified in R309-530, shall be installed within 18 months or the source must be abandoned as a source of drinking water and physically disconnected from the drinking water system.

(b) Systems which must retain use of ground water sources classified as under direct influence of surface water shall start disinfection immediately on those sources and monitor in accordance with residual disinfectant monitoring under treatment plant monitoring and reporting found in R309-215- as well as maintain satisfactory "CT" values in accordance with R309-200-5(7) during the 18 month interim period before conventional surface water treatment, or an

approved equivalent, is installed. Chlorine, chlorine dioxide, chloramine, and ozone are considered capable of attaining required levels of disinfection.

(c) Once a ground water source is classified as under the influence of surface water, it must be considered to be a surface water source. Thus, all requirements in these rules which pertain to surface water sources also pertain to ground water under the direct influence of surface water.

R309-505-8. High Quality Ground Water Sources.

(1) Determination of a High Quality Ground Water Source.

A well or spring shall be deemed to be a high quality ground water source if the following conditions are met:

(a) The design and construction of the source are in conformance with these rules.

(b) Testing establishes that all applicable drinking water quality standards, as given in R309-200, are met, and can be expected to be met in the future.

(c) The source is not susceptible to natural or man-caused contamination and, furthermore, adequate protection zones and management areas have been established in accordance with R309-600.

(2) Treatment of a High Quality Ground Water Source.

A high quality ground water source requires no treatment.

R309-505-9. Best Available Technologies (BATs).

EPA has identified Best Available Technologies (BATs) in national regulations regarding drinking water. BATs include Activated Alumina, Coagulation/Filtration, Direct Filtration, Diatomite Filtration, Electrodialysis Reversal, Corrosion Control, Granulated Activated Carbon, Ion Exchange, Lime Softening, Reverse Osmosis, Polymer Addition and Packed Tower Aeration. Where a BAT is used to reduce the concentration of a contaminant:

(a) the requirements of R309-500 through R309-550 shall govern if the BAT is included in these rules.

(b) if the BAT is not included in R309-500 through R309-550, review of plans and specifications for a project will be governed by R309-530-9, New Treatment Processes or Equipment.

R309-505-10. Temporary Use of Bottled Water.

Initially the use of bottled water may be allowed on a temporary basis by the Director. The continued use of bottled water shall be reviewed at least annually and only allowed after the Director is satisfied that the PWS has made reasonable attempts since the last review to provide acceptable water on a more permanent basis without success.

KEY: drinking water, surface water treatment, low quality ground water, high quality ground water

September 13, 2005

19-4-104

Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.
R309-510. Facility Design and Operation: Minimum Sizing Requirements.

R309-510-1. Purpose.

This rule specifies requirements for the sizing of public drinking water facilities such as sources (along with their associated treatment facilities), storage tanks, and pipelines. It is intended to be applied in conjunction with R309-500 through R309-550. Collectively, these rules govern the design, construction, operation and maintenance of public drinking water system facilities. These rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water which consistently meet applicable drinking water quality requirements and do not pose a threat to general public health.

R309-510-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-510-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-510-4. General.

This rule provides estimates of quantities and flow rates which shall be used in the design of new systems, or if there is an absence of data collected by the public water system meeting the required confidence level for a reduction mentioned below, when evaluating water sources, storage facilities and pipelines. Within each of these three broad categories, the designer shall ascertain the contributions on demand from the indoor use of water, the outdoor use of water, and fire suppression activities (if required by local authorities). These components must be added together to determine the total demand on a given facility.

R309-510-5. Reduction of Requirements.

If acceptable data are presented, certain number of days of peak day demand to establish minimum source capacity; certain number of years of annual demand to establish minimum water right requirements; and certain number of readings of peak hourly demand to establish minimum peak instantaneous demand; showing that the requirements made herein are excessive for a given project, the requirements may be appropriately reduced to the 90th percentile of readings, on a case by case basis by the Director. In the case of Recreational Home Developments, in order to qualify for a quantity reduction, not only must the actual water consumption be less than quantities required by rule but enforceable policy restrictions must have been approved which prevent the use of such dwellings as a permanent domicile and these restrictions shall have been consistently enforced. The Director may re-consider any reduced minimums if the nature and use of the system changes.

R309-510-6. Water Conservation.

This rule is based upon typical current water consumption patterns in the State of Utah. They may be excessive in certain settings where legally enforceable water conservation measures exist. In these cases the requirements made in this section may be reduced on a case-by-case basis by the Director.

R309-510-7. Source Sizing.

(1) Peak Day Demand and Average Yearly Demand.

Sources shall legally and physically meet water demands under two separate conditions. First, they shall meet the anticipated water demand on the day of highest water consumption. This is referred to as the peak day demand. Second, they shall also be able to provide one year's supply of water, the average yearly demand.

(2) Estimated Indoor Use.

In the absence of firm water use data, Tables 510-1 and 510-2 shall be used to estimate the peak day demand and average yearly demand for indoor water use.

TABLE 510-1
Source Demand for Indoor Use

Type of Connection	Peak Day Demand	Average Yearly Demand
Year-round use		
Residential	800 gpd/conn	146,000 gal./conn
ERC	800 gpd/ERC	146,000 gal./ERC
Seasonal/Non-residential use		
Modern Recreation Camp	60 gpd/person	(see note
1) Semi-Developed Camp		
a. with pit privies	5 gpd/person	(see note
1) b. with flush toilets	20 gpd/person	(see note
1) Hotel, Motel, and Resort	150 gpd/unit	(see note
1) Labor Camp	50 gpd/person	(see note
1) Recreational Vehicle Park	100 gpd/pad	(see note
1) Roadway Rest Stop	7 gpd/vehicle	(see note
1) Recreational Home Development	400 gpd/conn	(see note

Note 1. Annual demand shall be based on the number of days the system will be open during the year times the peak day demand unless data acceptable to the Director, with a confidence level of 90% or greater showing a lesser annual consumption, can be presented.

TABLE 510-2
Source Demand for Individual Establishments^(a)
(Indoor Use)

Type of Establishment	Peak Day Demand (gpd)
Airports	
a. per passenger	3
b. per employee	15
Boarding Houses	
a. for each resident boarder and employee	50
b. for each nonresident boarders	10
Bowling Alleys, per alley	
a. with snack bar	100
b. with no snack bar	85
Churches, per person	5
Country Clubs	
a. per resident member	100
b. per nonresident member present	25
c. per employee	15
Dentist's Office	
a. per chair	200
b. per staff member	35
Doctor's Office	
a. per patient	10
b. per staff member	35
Fairgrounds, per person	1
Fire Stations, per person	
a. with full-time employees and food prep.	70
b. with no full-time employees and no food prep.	5
Gyms	
a. per participant	25
b. per spectator	4
Hairdresser	
a. per chair	50
b. per operator	35
Hospitals, per bed space	250
Industrial Buildings, per 8 hour shift,	
per employee (exclusive of industrial waste)	
a. with showers	35

b. with no showers	15
Launderette, per washer	580
Movie Theaters	
a. auditorium, per seat	5
b. drive-in, per car space	10
Nursing Homes, per bed space	280
Office Buildings and Business Establishments, per shift, per employee (sanitary wastes only)	
a. with cafeteria	25
b. with no cafeteria	15
Picnic Parks, per person (toilet wastes only)	5
Restaurants	
a. ordinary restaurants (not 24 hour service)	35 per seat
b. 24 hour service	50 per seat
c. single service customer utensils only	2 per customer
d. or, per customer served (includes toilet and kitchen wastes)	10
Rooming House, per person	40
Schools, per person	
a. boarding	75
b. day, without cafeteria, gym or showers	15
c. day, with cafeteria, but no gym or showers	20
d. day, with cafeteria, gym and showers	25
Service Stations ^(b) , per vehicle served	10
Skating Rink, Dance Halls, etc., per person	
a. no kitchen wastes	10
b. Additional for kitchen wastes	3
Ski Areas, per person (no kitchen wastes)	10
Stores	
a. per public toilet room	500 b.
per employee	11
Swimming Pools and Bathhouses ^(c) , per person	10
Taverns, Bars, Cocktail Lounges, per seat	20
Visitor Centers, per visitor	5

NOTES FOR TABLE 510-2:

1. Source capacity must at least equal the peak day demand of the system. Estimate this by assuming the facility is used to its maximum.

2. Generally, storage volume must at least equal one average day's demand.

3. Peak instantaneous demands may be estimated by fixture unit analysis as per Appendix E of the 2006 International Plumbing Code.

(a) When more than one use will occur, the multiple use shall be considered in determining total demand. Small industrial plants maintaining a cafeteria and/or showers and club houses or motels maintaining swimming pools and/or laundries are typical examples of multiple uses. Uses other than those listed above shall be considered in relation to established demands from known or similar installations.

(b) or 250 gpd per pump,

(c) $20 \times \{ \text{Water Area (Ft}^2\text{)} / 30 \} + \text{Deck Area (Ft}^2\text{)}$

(3) Estimated Outdoor Use.

In the absence of firm water use data, Table 510-3 shall be used to estimate the peak day demand and average yearly demand for outdoor water use. The following procedure shall be used:

(a) Determine the location of the water system on the map entitled Irrigated Crop Consumptive Use Zones and Normal Annual Effective Precipitation, Utah as prepared by the Soil Conservation Service (available from the Division). Find the numbered zone, one through six, in which the water system is located (if located in an area described "non-arable" find nearest numbered zone).

(b) Determine the net number of acres which may be irrigated. This is generally done by starting with the gross acreage, then subtract out any area of roadway, driveway, sidewalk or patio pavements along with housing foundation footprints that can be reasonably expected for lots within a new subdivision or which is representative of existing lots. Before any other land area which may be considered "non-irrigated" (e.g. steep slopes, wooded areas, etc.) is subtracted from the gross area, the Director shall be consulted and agree that the land in question will not be irrigated.

(c) Refer to Table 510-3 to determine peak day demand and average yearly demand for outdoor use.

(d) The results of the indoor use and outdoor use tables shall be added together and source(s) shall be legally and physically capable of meeting this combined demand.

TABLE 510-3
Source Demand for Irrigation
(Outdoor Use)

Map Zone	Peak Day Demand (gpm/irrigated acre)	Average Yearly Demand (AF/irrigated acre)
1	2.26	1.17
2	2.80	1.23
3	3.39	1.66
4	3.96	1.87
5	4.52	2.69
6	4.90	3.26

(4) Accounting for Variations in Source Yield.

The design engineer shall consider whether flow from the source(s) may vary. Where flow varies, as is the case for most springs, the minimum flow rate shall be used in determining the number of connections which may be supported by the source(s). Where historical records are sufficient, and where peak flows from the source(s) correspond with peak demand periods, the Director may grant an exception to this requirement.

R309-510-8. Storage Sizing.

(1) General.

Each storage facility shall provide:

(a) equalization storage volume, to satisfy average day demands for water for indoor use as well as outdoor use,

(b) fire suppression storage volume, if the water system is equipped with fire hydrants and intended to provide fire suppression water, and

(c) emergency storage, if deemed appropriate by the water supplier or the Director, to meet demands in the event of an unexpected emergency situation such as a line break or a treatment plant failures.

(2) Equalization Storage.

(a) All public drinking water systems shall be provided with equalization storage. The amount of equalization storage which must be provided varies with the nature of the water system, the extent of outdoor use and the location of the system.

(b) Required equalization storage for indoor use is provided in Table 510-4. Storage requirements for non-community systems not listed in this table shall be determined by calculating the average day demands from the information given in Table 510-2.

TABLE 510-4
Storage Volume for Indoor Use

Type	Volume Required (gallons)
Community Systems	
Residential;	
per single resident service connection	400
Non-Residential;	
per Equivalent Residential Connection (ERC)	400
Non-Community Systems	
Modern Recreation Camp; per person	30
Semi-Developed Camp; per person	
a. with Pit Privies	2.5
b. with Flush Toilets	10
Hotel, Motel and Resort; per unit	75
Labor Camp; per unit	25
Recreational Vehicle Park; per pad	50
Roadway Rest Stop; per vehicle	3.5
Recreational Home Development; per connection	400

(c) Where the drinking water system provides water for outdoor use, such as the irrigation of lawns and gardens, the equalization storage volumes estimated in Table 510-5 shall be added to the indoor volumes estimated in Table 510-4. The procedure for determining the map zone and irrigated acreage for using Table 510-5 is outlined in Section R309-510-7(3).

TABLE 510-5
Storage Volume for Outdoor Use

Map Zone	Volume Required (gallons/irrigated acre)
1	1,782
2	1,873
3	2,528
4	2,848
5	4,081
6	4,964

(3) Fire Suppression Storage.

Fire suppression storage shall be required if the water system is intended to provide fire fighting water as evidenced by fire hydrants connected to the piping. The design engineer shall consult with the local fire suppression authority regarding needed fire flows in the area under consideration. This information shall be provided to the Division. Where no local fire suppression authority exists, needed fire suppression storage shall be assumed to be 120,000 gallons (1000 gpm for 2 hours).

(4) Emergency Storage.

Emergency storage shall be considered during the design process. The amount of emergency storage shall be based upon an assessment of risk and the desired degree of system dependability. The Director may require emergency storage when it is warranted to protect public health and welfare.

R309-510-9. Distribution System Sizing.

(1) General Requirements.

The distribution system shall be designed to insure that minimum water pressures as required in R309-105-9 exist at all points within the system. If the distribution system is equipped with fire hydrants, the Division will require a letter from the local fire authority stating the fire flow and duration required of the area to insure the system shall be designed to provide minimum pressures as required in R309-105-9 to exist at all points within the system when needed fire flows are imposed upon the peak day demand flows of the system.

(2) Indoor Use, Estimated Peak Instantaneous Demand.

(a) For community water systems and large non-community systems, the peak instantaneous demand for each pipeline shall be assumed for indoor use as:

$$Q = 10.8 \times N^{0.64}$$

where N equals the total number of ERC's, and Q equals the total flow (gpm) delivered to the total connections served by that pipeline.

For Recreational Vehicle Parks, the peak instantaneous flow for indoor use shall be based on the following:

TABLE 510-6

Peak Instantaneous Demand for Recreational Vehicle Parks

Number of Connections	Formula
0 to 59	$Q = 4N$
60 to 239	$Q = 80 + 20N^{0.5}$
240 or greater	$Q = 1.6N$

NOTES FOR TABLE 510-6:

Q is total peak instantaneous demand (gpm) and N is the maximum number of connections. However, if the only water use is via service buildings the peak instantaneous demand shall be calculated for the number of fixture units as presented in Appendix E of the 2006 International Plumbing Code.

(b) For small non-community water systems the peak instantaneous demand to be estimated for indoor use shall be calculated on a per-building basis for the number of fixture units as presented in Appendix E of the 2006 International Plumbing Code.

(3) Outdoor Use, Estimated Peak Instantaneous Demand.

Peak instantaneous demand to be estimated for outdoor

use is given in Table 510-7. The procedure for determining the map zone and irrigated acreage for using Table 510-7 is outlined in Section R309-510-7(3).

TABLE 510-7

Peak Instantaneous Demand for Outdoor Use

Map Zone	Peak Instantaneous Demand (gpm/irrigated acre)
1	4.52
2	5.60
3	6.78
4	7.92
5	9.04
6	9.80

(4) Fire Flows.

(a) Distribution systems shall be designed to deliver needed fire flows if fire hydrants are provided. The design engineer shall consult with the local fire suppression authority regarding needed fire flows in the area under consideration. This information shall be provided to the Division. Where no local fire suppression authority exists, needed fire flows shall be assumed to be 1000 gpm unless the local planning commission provides a letter indicating that the system will not be required to provide any fire flows, in which case fire hydrants will not be allowed to be installed on any mains.

(b) If a distribution system is equipped with fire hydrants, the system shall be designed to insure that minimum pressures required by R309-105-9 exist at all points within the system when fire flows are added to the peak day demand of the system. Refer to Section R309-510-7 for information on determining the peak day demand of the system.

KEY: drinking water, minimum sizing, water conservation
August 28, 2013
Notice of Continuation March 13, 2015

19-4-104

R309. Environmental Quality, Drinking Water.**R309-511. Hydraulic Modeling Requirements.****R309-511-1. Purpose.**

The purpose of this rule is to ensure that the increased water demand created by new construction will not adversely affect existing or new water users. This will be accomplished by requiring the public water system or its agent to evaluate the water delivery system using a hydraulic model and by certifying to the Director that the project will not adversely impact the system. It is intended that the public water system or its agent will use the findings of the hydraulic model to design improvements providing satisfactory service to both existing and new water users. This rule requires the public water system or its agent to certify that the design meets minimum flow requirements of R309-510 and pressure requirements as set forth in rule R309-105-9.

R309-511-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-511-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

"The public water system or its agent" is the individual responsible for signing the certification and preparing the Hydraulic Modeling Design Elements Report. This individual shall be a registered professional engineer, licensed to practice in the State of Utah.

R309-511-4. General.**(1) Rule Applicability.**

(a) This rule applies to public drinking water systems categorized as community water systems as defined by rule R309-100-4(2), and to non-transient non-community water systems that have system demands higher than required by R309-510 or with demands for fire suppression. All public drinking water systems are still required to comply with R309-550-5 with respect to water main design, which may require a hydraulic analysis. Submission of the Hydraulic Model Report, as defined in R309-511-7 and 8, is not required for projects meeting one of the following criteria:

(i) public drinking water projects that will not result in negative hydraulic impact, such as, but not limited to;

(A) addition of new sources in accordance with R309-515;

(B) adding disinfection, fluoridation, or other treatment facilities that do not adversely impact flow, pressure or water quality;

(C) storage tank repair or recoating;

(D) water main additions with no expansion of service (e.g., looping lines);

(E) adding transmission lines to storage or sources without adding service connections;

(F) adding pump station(s) from source or storage upstream of distribution service connections; or,

(G) public drinking water projects that have negligible hydraulic impact as determined by the Director.

(ii) public drinking water projects that are a part of a planned phase of a master plan previously approved by the Director per R309-500-6(3)(a);

(iii) the water system maintains and updates a hydraulic model of the system, and has designated a professional engineer responsible for overseeing the hydraulic analysis in meeting the requirements of R309-511 in writing to the Director; or,

(iv) the water system has a means that is deemed acceptable by the Director to gather real-time data indicative of hydraulic conditions in model scenarios of R309-511-5(9), and the real-time data show the system is capable of meeting the flow and pressure requirements for the additional demands placed on the existing system.

(b) Professional Engineer's certification of the hydraulic modeling results, as defined in R309-511-4(2)(c) and R309-511-6(1), shall be part of the submission of plans for any public drinking water project as defined in R309-500-5(1) except for the projects listed under R309-511-4(1)(a)(i).

(c) A public water system must clearly identify the reason in the plan submittal if it wishes to demonstrate that R309-511 does not apply to a new construction project. In some cases, supporting documentation may be needed.

(d) If there are existing deficiencies in the water system, the Director may allow a new construction project to proceed in accordance with the plan review requirements in R309-500 through 550 as long as the public water system demonstrates that the new construction project is located in a hydraulically separated area and does not adversely impact the existing deficiencies, or does not create new deficiencies within the water system.

(2) Rule Elements.

The public water system or its agent, in connection with the submission of plans and specifications to the Director, shall perform the following:

(a) conduct a hydraulic modeling evaluation consistent with the requirements as set forth in this rule and R309-510. This model shall include either the entire public drinking water system or the specific areas affected by the new construction if hydraulically separated areas exist within the water system;

(b) calibrate the model using field measurements and observations;

(c) certify in writing to the Director that the design complies with the sizing requirements of R309-510 and the minimum water pressures of R309-105-9;

(d) prepare and submit a Hydraulic Model Design Elements Report (see R309-511-7); and,

(f) prepare a System Capacity and Expansion Report if required (see R309-511-8).

R309-511-5. Requirements for the Hydraulic Model.

The following minimum requirements must be incorporated into hydraulic models that are constructed to meet these requirements:

(1) include at least 80 percent of the total pipe lengths in the distribution system affected by the proposed project;

(2) account for 100 percent of the flow in the distribution system affected by the proposed project. Water demand allocation must account for at least 80 percent of the flow delivered by the distribution system affected by the proposed project if customer usage in the system is metered;

(3) include all 8-inch diameter and larger pipes. Pipes smaller than 8-inch diameter shall also be included if they connect pressure zones, storage facilities, major demand areas, pumps, and control valves, or if they are known or expected to be significant conveyers of water such as fire suppression demand. Model piping does not need to include service lateral piping;

(4) include all pipes serving areas at higher elevations, dead ends, remote areas of a distribution system, and areas with known under-sized pipelines;

(5) include all storage facilities and accompanying controls or settings applied to govern the open/closed status of the facility that reflect standard operations;

(6) if applicable, include all pump stations, drivers (constant or variable speed), and accompanying controls or

settings applied to govern their on/off/speed status that reflect various operating conditions and drivers;

(7) include all control valves or other system features that could significantly affect the flow of water through the distribution system (e.g., interconnections with other systems and pressure reducing valves between pressure zones) reflecting various operating conditions;

(8) impose peak day and peak instantaneous demands to the water system's facilities. These demands may be peak day and peak instantaneous demands per R309-510, the reduced demand approved by the Director per R309-510-5, or the demands experienced by the water system that are higher than the values listed in R309-510. This may require multiple model simulations to account for the varying water demand conditions. In some cases, extended period simulations are needed to evaluate changes in operating conditions over time. This will depend on the complexity of the water system, extent of anticipated fire event and nature of the new expansion;

(9) calibrate the model to adequately represent the actual field conditions using field measurements and observations;

(10) if fire hydrants are connected to the distribution system, account for fire suppression requirements specified by local fire authority or use the default values stated in R309-510-9(4). For significant fire suppression demand, extended simulations must contain the run time for the period of the anticipated fire event. In some cases, a steady-state model may be sufficient for residential fire suppression demand; and,

(11) account for outdoor use, such as irrigation, if the drinking water system supplies water for outdoor use.

R309-511-6. Elements of the Public Water System or Its Agent's Certification.

(1) The public water system or its agent's certification. The Director relies upon the professional judgment of the registered professional engineer who certifies that the hydraulic analysis and evaluation have been done properly and that the flow and pressure requirements have been met. The public water system or its agent shall, after a thorough review, submit a document to the Director certifying that the following requirements have been met:

(a) the hydraulic model requirements as set forth in rule R309-511-5;

(b) the appropriate demand requirements as specified in this rule and rule R309-510 have been used to evaluate various operating conditions of the public drinking water system;

(c) the hydraulic model predicts that new construction will not result in any service connection within the new expansion area not meeting the minimum distribution system pressures as specified in R309-105-9;

(d) the hydraulic model predicts that new construction will not decrease the pressures within the existing water system such that the minimum distribution system pressures are not met, as specified in R309-105-9;

(e) the calibration methodology is described and the model is sufficiently accurate to represent conditions likely to be experienced in the water delivery system; and,

(f) identify the hydraulic modeling method, and if computer software was used, the software name and version used.

(2) The format of the public water system or its agent's submission.

The public water system or its agent shall submit to the Director the following documentation:

(a) the certification as required in R309-511-6(1). The certification shall be signed, dated, and stamped by a registered professional engineer, licensed to practice in the State of Utah;

(b) a Hydraulic Model Design Elements Report (see R309-511-7). The document shall be signed, dated, and stamped by a registered professional engineer, licensed to practice in the State of Utah; and,

(c) for community public water systems, the water system management shall certify that they have received a copy of input and output data for the hydraulic model with the simulation showing the worst case results in terms of water system pressure and flow.

(3) The submission of supporting documentation.

The public water system or its agent shall submit a System Capacity and Expansion Report (see R309-511-8) if requested by the Director. The document shall be signed, dated, and stamped by a registered professional engineer, licensed to practice in the State of Utah.

R309-511-7. Hydraulic Model Design Elements Report.

The public water system or its agent shall prepare a Hydraulic Model Design Elements Report along with, and in support of, the certification stated in R309-511-6(1). The Hydraulic Model Design Elements Report shall contain, but is not limited to, the following elements:

(1) if the public drinking water system provides water for outdoor use, the report must describe the criteria used to estimate this demand. If the irrigation demand map in R309-510-7(3) is not used, the report shall provide justification for the alternative demands used in the model. If the irrigation demands are based on the map in R309-510-7(3) the report must identify the irrigation zone number, a statement and/or map of how the irrigated acreage is spatially distributed, and the total estimated irrigated acreage. The indicated irrigation demands must be used in the model simulations;

(2) the total number of connections served by the water system including existing connections and anticipated new connections served by the water system after completion of the construction of the project;

(3) the total number of equivalent residential connections (ERC) including both existing connections as well as anticipated new connections associated with the project. The number of ERCs must include high as well as low-volume water users. The determination of the ERCs shall be based on flow requirements using the anticipated demand as outlined in R309-510, or based on alternative sources of information that are deemed acceptable by the Director;

(4) the methodology used for calculating demand and allocating it to the model; a summary of pipe length by diameter; a hydraulic schematic of the distribution piping showing pressure zones, general pipe connectivity between facilities and pressure zones, storage, elevation and sources; and a list or ranges of values of the friction coefficient used in the hydraulic model according to pipe material and condition in the system. All coefficients of friction used in the hydraulic analysis shall be consistent with standard practices;

(5) a statement stating either "yes fire hydrants exist or will exist within the system" or "there are no fire hydrants connected to the system and there is no plan to add fire hydrants with this project." Either statement will require the identification of the local fire authority's name, address, and contact information, as well as the fire flow quantity and duration if required;

(6) the locations of the lowest pressures within the distribution system, and areas identified by the hydraulic model as not meeting each scenario of the minimum pressure requirements in R309-105-9; and,

(7) calibration method and quantitative summary of the calibration results (e.g., comparison tables, graphs).

R309-511-8. System Capacity and Expansion Report.

The public water system or its agent may be required to prepare a System Capacity and Expansion Report along with a Hydraulic Model Design Elements Report, as specified above, in support of the certification. It is intended that the System Capacity and Expansion Report be prepared, maintained, and used by the public water system's management to make informed decisions about its capability to provide water service to future customers and need only be submitted to the Division if requested by the Director. The System Capacity and Expansion Report shall consist of the elements described in R309-110-4 under the definition of "Master Plan" and shall be updated if significant growth or changes to the water system have occurred.

KEY: drinking water, hydraulic modeling

January 21, 2014

19-4-104

Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.
R309-515. Facility Design and Operation: Source Development.

R309-515-1. Purpose.

This rule specifies requirements for public drinking water sources. It is intended to be applied in conjunction with R309-500 through R309-550. Collectively, these rules govern the design, construction, operation and maintenance of public drinking water system facilities. These rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water that consistently meet applicable drinking water quality requirements and do not pose a threat to general public health.

R309-515-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code Annotated and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-515-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-515-4. General.

(1) Issues to be Considered.

The selection, development, and operation of a public drinking water source must be done in a manner that will protect public health and assure that all required water quality standards, as described in R309-200, are met.

(2) Communication with the Division.

Because of the issues described above in (1), engineers are advised to work closely with the Division to help assure that sources are properly sited, developed, and operated.

(3) Number of Sources and Quantity Requirements.

Community water systems serving more than 100 connections shall have a minimum of two sources, except where served by a surface water treatment plant. For all systems, the total developed source capacity shall equal or exceed the peak day demand of the system. Refer to R309-510-7 of these rules for procedure to estimate the peak day demand.

(4) Quality Requirements.

In selecting a source of water for development, the designing engineer shall demonstrate to the satisfaction of the Director that the source(s) selected for use in public water systems are of satisfactory quality, or can be treated in a manner so that the quality requirements of R309-200 can be met.

(5) Initial Analyses.

All new drinking water sources, unless otherwise noted below, shall be analyzed for the following:

(a) all the primary and secondary inorganic contaminants listed in R309-200, Table 200-1 and Table 200-5 (excluding Asbestos unless it would be required by R309-205-5(2));

(b) Ammonia as N; Boron; Calcium; Copper; Lead; Magnesium; Potassium; Turbidity, as NTU; Specific Conductivity at 25 degrees Celsius, micro mhos/cm; Bicarbonate; Carbon Dioxide; Carbonate; Hydroxide; Phosphorous, Ortho as P; Silica, dissolved as SiO₂; Surfactant as MBAS; Total Hardness as CaCO₃; and Alkalinity as CaCO₃;

(c) pesticides, PCBs and SOC's as listed in R309-200-5(3)(a), Table 200-2 unless the system is a transient non-community PWS or, if a community PWS or non-transient non-community PWS, has received waivers in accordance with R309-205-6(1)(f). The following six constituents have

been excused from monitoring in the State by the EPA, dibromochloropropane, ethylene dibromide, Diquat, Endothall, glyphosate and Dioxin;

(d) VOCs as listed in R309-200-5(3)(b), Table 200-3 unless the system is a transient non-community PWS; and,

(e) radiologic chemicals as listed in R309-200-5(4) unless the system is a non-transient non-community PWS or a transient non-community PWS.

All analyses shall be performed by a certified laboratory as required by R309-205-4 (Specially prepared sample bottles are required),

(6) Source Classification.

Subsection R309-505-7(1)(a)(i) provides information on the classification of water sources. The Director shall classify all existing or new sources as either:

(a) surface water or ground water under direct influence of surface water which requires conventional surface water treatment or an approved equivalent; or as,

(b) ground water not under the direct influence of surface water.

(7) Latitude and Longitude.

The latitude and longitude, to at least the nearest second, or the location by section, township, range, and course and distance from an established outside section corner or quarter corner of each point of diversion shall be submitted to the Director prior to source approval.

R309-515-5. Surface Water Sources.

(1) Definition.

A surface water source, as is defined in R309-110, shall include, but not be limited, to tributary systems, drainage basins, natural lakes, artificial reservoirs, impoundments and springs or wells that have been classified as being directly influenced by surface water. Surface water sources will not be considered for culinary use unless they can be rendered acceptable by conventional surface water treatment or other equivalent treatment techniques acceptable to the Director.

(2) Pre-design Submittal.

The following information must be submitted to the Director and approved in writing before commencement of design of diversion structures and/or water treatment facilities:

(a) a copy of the chemical analyses required by R309-200 and described in R309-515-4(5) above; and,

(b) a survey of the watershed tributary to the watercourse along which diversion structures are proposed. The survey shall include, but not be limited to:

(i) determining possible future uses of impoundments or reservoirs;

(ii) the present stream classification by the Division of Water Quality, any obstacles to having stream(s) reclassified 1C, and determining degree of watershed control by owner or other agencies;

(iii) assessing degree of hazard to the supply by accidental spillage of materials that may be toxic, harmful or detrimental to treatment processes;

(iv) obtaining samples over a sufficient period of time to assess the microbiological, physical, chemical and radiological characteristics and variations of the water;

(v) assessing the capability of the proposed treatment process to reduce contaminants to applicable standards; and,

(vi) consideration of currents, wind and ice conditions, and the effect of tributary streams at their confluence.

(3) Pre-construction Submittal.

Following approval of a surface water source, the following additional information must be submitted for review and approval prior to commencement of construction:

(a) acceptable evidence that the water system has a legal right to divert water for the proposed uses from the proposed

sources;

(b) minimum quantity that the surface water source is capable of producing (see R309-515-5(4)(a) below); and

(c) complete plans and specifications and supporting documentation for the proposed treatment facilities to ascertain compliance with R309-525 or R309-530.

(4) Quantity.

The quantity of water from surface sources shall:

(a) be assumed to be no greater than the low flow of a 25-year recurrence interval or the low flow of record for these sources when 25 years of records are not available;

(b) meet or exceed the anticipated peak day demand for water as estimated in R309-510-7 and provide a reasonable surplus for anticipated growth; and,

(c) be adequate to compensate for all losses such as silting, evaporation, seepage, and sludge disposal, which would be anticipated in the normal operation of the treatment facility.

(5) Diversion Structures.

Design of intake structures shall provide for:

(a) withdrawal of water from more than one level if quality varies with depth;

(b) intake of lowest withdrawal elevation located at sufficient depth to be kept submerged at the low water elevation of the reservoir;

(c) separate facilities for release of less desirable water held in storage;

(d) occasional cleaning of the inlet line;

(e) a diversion device capable of keeping large quantities of fish or debris from entering an intake structure; and,

(f) suitable protection of pumps where used to transfer diverted water (refer to R309-540-5).

(6) Impoundments.

The design of an impoundment reservoir shall provide for, where applicable:

(a) removal of brush and trees to the high water level;

(b) protection from floods during construction;

(c) abandonment of all wells, which may be inundated (refer to applicable requirements of the Division of Water Rights); and,

(d) adequate precautions to limit nutrient loads.

R309-515-6. Ground Water - Wells.

(1) Required Treatment.

If properly developed, water from wells may be suitable for culinary use without treatment. A determination concerning whether treatment may be required can only be made after the source has been developed and evaluated.

(2) Standby Power.

Water suppliers shall assess the capability of their system in the event of a power outage. If a community water system has no naturally flowing water sources such as springs or flowing wells, one or more of the system's sources shall be equipped for operation during power outages. In this event:

(a) to ensure continuous service when the primary power has been interrupted, a redundant power supply shall be provided. A redundant power supply may include a transfer switch for auxiliary power such as a generator or a power supply service with coverage from two independent substations.

(b) when automatic pre-lubrication of pump bearings is necessary, and an auxiliary power supply is provided, the pre-lubrication line shall be provided with a valved by-pass around the automatic control, or the automatic control shall be wired to the emergency power source.

(3) The Utah Division of Water Rights.

The Utah Division of Water Rights (State Engineer's Office) regulates the drilling of water wells. Before the

drilling of a well commences, the well driller must receive a start card from the State Engineer's Office. For public drinking water supply wells, the rules of R655-4 apply and shall be followed in addition to these rules.

(4) Source Protection.

Public drinking water systems are responsible for protecting their sources from contamination. The selection of a well location shall only be made after consideration of the requirements of R309-600. Sources shall be located in an area that will minimize threats from existing or potential sources of pollution.

Generally, sewer lines may not be located within zone one and zone two of a public drinking water system's source protection zones. However, if the following precautions are taken, sewer lines may be permitted within a public drinking water system's source protection zone one and zone two. Sewer lines shall meet the conditions identified in R309-600-13(3), and shall be specially constructed as follows throughout zone one in aquifers classified as protected, and zones one and two, if the aquifer is classified as unprotected.

(a) Sewer lines shall be constructed to remain watertight. The lines shall be deflection-tested in accordance with the Division of Water Quality Rule R317-3. The lines shall be video-inspected for any defect following completion of construction and before being placed in service. The sewer pipe material shall be:

(i) high density polyethylene (HDPE) pipe with a PE3408 or PE4710 rating from the Plastic Pipe Institute and have a Dimension Ratio (DR) of 17 or less, and all joints shall be fusion-welded; or,

(ii) polyvinyl chloride (PVC) pipe meeting AWWA Specification C900 or C905 and have a DR of 18 or less. PVC pipe shall be either restrained gasketed joints or shall be fusion-welded. Solvent cement joints shall not be acceptable. The PVC pipe shall be clearly identified when installed, by marking tape or other means as a sanitary sewer line; or,

(iii) ductile iron pipe with ceramic epoxy lining, polyethylene encasement, restrained joints, and a minimum pressure class of 200.

(b) Procedures for leakage tests shall be specified and comply with Division of Water Quality Rule R317-3 requirements.

(c) Lateral to main connection shall be fusion-welded, shop-fabricated, or saddled with a mechanical clamping watertight device designed for the specific pipe.

(d) Inlet and outlet sewer pipes shall be joined to a manhole with a gasketed flexible watertight connection.

(e) The sewer pipe shall be laid with no greater than 2 percent deflection at any joint.

(f) Backfill shall be compacted to not less than 95 percent of maximum laboratory density as determined in accordance with ASTM Standard D-690.

(g) Sewer manholes shall meet the following requirements.

(i) The manholes shall be constructed of reinforced concrete.

(ii) Manhole base and walls, up to a point at least 12 inches above the top of the upper most sewer pipe entering the manhole, shall be fabricated in a single concrete pour without joints.

(iii) The manholes shall be air pressure tested after installation.

(h) In unprotected aquifers, an impermeable cutoff wall shall be constructed in all sewer trenches on the up-gradient edge of zone two. In protected aquifers, an impermeable cutoff wall shall be constructed in all sewer trenches on the up-gradient edge of zone one.

(5) Outline of Well Approval Process.

(a) Well drilling shall not commence until both of the

following items are submitted and receive a favorable review:

(i) a Preliminary Evaluation Report on source protection issues as required by R309-600-13, and

(ii) engineering plans and specifications governing the well drilling, prepared by a licensed well driller holding a current Utah Well Drillers License or prepared, signed, and stamped by a licensed professional engineer or professional geologist licensed to practice in Utah.

(b) Inspection of Well Sealing During Construction.

(i) Authorized Individuals

(A) The following individuals are authorized to witness the well sealing procedure for a public drinking water well:

(I) an engineer or a geologist from the Division of Drinking Water;

(II) a district engineer of the Department of Environmental Quality;

(III) an authorized representative of the Division of Water Rights; or,

(IV) an individual having written authorization from the Director and meeting the below listed criteria.

(B) At the time of the well sealing an individual, who is authorized per (i)(A)(IV), shall present to the well driller a copy of the letter authorizing him or her to witness a well sealing on behalf of the Division of Drinking Water. A copy of this letter shall be appended to the witness certification letter.

(C) At least three days before the anticipated well sealing, the well driller shall arrange for an authorized witness listed in (i)(A) above to witness the procedure. (See R309-515-6(6)(i)).

(ii) Obtaining Authorization

(A) To be authorized per (i)(A)(IV) above to witness a well sealing procedure, an individual must have no relationship to the driller or the well's owner. The individual must have at least five years professional experience designing wells, supervising well drilling or other equivalent experience associated with well drilling or well sealing that is acceptable to the Director.

(B) Individuals, desiring the Director's authorization to witness a well sealing procedure, shall provide the following information to the Director for review over his or her signature attesting to the correctness of the information:

(I) a detailed description of the applicant's experience with well drilling projects, including number of years of experience and type of work. Three references confirming this professional experience are required.

(II) evidence of licensure as a professional engineer or professional geologist in Utah.

(III) no relationship may exist between a person authorized to witness well sealings and a well driller that would serve as the basis for suspicion of favoritism, leniency, or punitive action in the performance of this task. Examples of such relationships would be family; former long-term employment associations; business partnerships, either formal or informal; etc. The Director's decision, with right of appeal as provided in R305-7, shall be accepted relative to what constitutes a conflict of interest or a relationship sufficient to disqualify an applicant from all or specific witness opportunities.

(IV) An acknowledgement that he/she would not be acting as an agent or employee of the State of Utah and any losses incurred while acting as a witness would not be covered by governmental immunity or Utah's insurance.

(VI) Willingness to follow established protocols and attend such training events as may be required by the Director.

(VII) Complete with a minimum 75 percent passing grade, an examination on water well drilling rules, as offered by the Division of Water Rights.

(C) The Director may rescind the authorization if an individual fails to comply with the criteria or conditions of authorization listed above.

(iii) Well Seal Certification

The individual witnessing the well sealing procedure shall provide a signed letter, including the following information, to the Director within 30 days of the well sealing:

(A) certification that the well sealing procedure met all the requirements of Rule R309-515-6(6)(i);

(B) the water right under which the well was drilled and the well driller's license number;

(C) the public water system name (if applicable);

(D) the latitude and longitude of the well and method used for its determination;

(E) the well head's approximate elevation;

(F) casing diameter(s), length(s), and material(s);

(G) the size of the annulus between the borehole and casing;

(H) a description of the sealing process including the sealing material used, its volume, density, method of placement, and depth from surface; and,

(I) the names and company affiliations of other individuals observing the sealing procedure including, but not limited to, the well driller, the well owner, and/or a consultant.

(c) After completion of the well drilling, the following information shall be submitted and receive a favorable review before water from the well can be introduced into a public water system:

(i) a copy of the "Report of Well Driller" as required by the State Engineer's Office which is complete in all aspects and has been stamped as received by the same;

(ii) a copy of the letter from the authorized individual described in R309-515-6(5)(b) above, indicating inspection and confirmation that the well was grouted in accordance with the well drilling specifications and the requirements of this rule;

(iii) a copy of the aquifer drawdown test data, as a minimum, including the yield versus drawdown test data, as described in R309-515-6(10)(b) along with comments and interpretation by a licensed professional engineer or licensed professional geologist of the graphic drawdown information required by R309-515-6(10)(b)(vi)(E);

(iv) a copy of the chemical analyses required by R309-515-4(5);

(v) acceptable evidence that the water system owner has a legal right to divert water for the proposed use(s) from the well source(s);

(vi) a copy of complete plans and specifications prepared, signed, and stamped by a licensed professional engineer covering the well housing, equipment, and diversion piping necessary to introduce water from the well into the distribution system; and

(vii) a bacteriological analysis of water obtained from the well after installation of permanent equipment, disinfection, and flushing.

(d) An Operation Permit shall be obtained in accordance with R309-500-9 before any water from the well is introduced into a public water system.

(6) Well Materials, Design, and Construction.

(a) ANSI/NSF Standards 60 and 61 Certification.

All interior surfaces must consist of products complying with ANSI/NSF Standard 61. This requirement applies to drop pipes, well screens, coatings, adhesives, solders, fluxes, pumps, switches, electrical wire, sensors, and all other equipment or surfaces which may contact the drinking water.

All substances introduced into the well during construction or development shall be certified to comply with

ANSI/NSF Standard 60. This requirement applies to drilling fluids (biocides, clay thinners, defoamers, foamers, loss circulation materials, lubricants, oxygen scavengers, viscosifiers, weighting agents) and regenerants.

(b) Permanent Steel Casing Pipe shall:

(i) be new single steel casing pipe meeting AWWA Standard A-100, ASTM or API specifications and having a minimum weight and thickness as given in Table 6 found in R655-4-11.2.3 of the Utah Administrative Code (Administrative Rules for Water Well Drillers, adopted April 11, 2011, Division of Water Rights);

(ii) have additional thickness and weight, if minimum thickness is not considered sufficient to assure reasonable life expectancy of the well;

(iii) be capable of withstanding forces to which it is subjected;

(iv) be equipped with a drive shoe when driven;

(v) have full circumferential welds or threaded coupling joints; and

(vi) project at least 18 inches above the anticipated final ground surface and at least 12 inches above the anticipated pump house floor level. At sites subject to flooding, the top of the well casing shall terminate at least three feet above the 100-year flood level or the highest known flood elevation, whichever is higher.

(c) Non-Ferrous Casing Material.

The use of any non-ferrous material for a well casing shall receive prior approval of the Director based on the ability of the material to perform its desired function. Thermoplastic water well casing pipe shall meet AWWA Standard A100-06 and shall bear the logo NSF-wc indicating compliance with NSF Standard 14 for use as well casing.

(d) Disposal of Cuttings.

Cuttings and waste from well drilling operations shall not be discharged into a waterway, lake, or reservoir. The rules of the Utah Division of Water Quality must be observed with respect to these discharges.

(e) Packers.

Packers, if used, shall be of material that will not impart taste, odor, toxic substances, or bacterial contamination to the well water. Lead or partial lead packers are specifically prohibited.

(f) Screens.

The use of well screens is recommended where appropriate and, if used, they shall:

(i) be constructed of material resistant to damage by chemical action of groundwater or cleaning operations;

(ii) have size of openings based on sieve analysis of formations or gravel pack materials;

(iii) have sufficient diameter to provide adequate specific capacity and low aperture entrance velocities;

(iv) be installed so that the operating water level remains above the screen under all pumping conditions; and

(v) be provided with a bottom plate or wash-down bottom fitting of the same material as the screen.

(g) Plumbness and Alignment Requirements.

Every well shall be tested for plumbness and vertical alignment in accordance with AWWA Standard A100. Plans and specifications submitted for review shall:

(i) have the test method and allowable tolerances clearly stated in the specifications; and

(ii) clearly indicate any options the design engineer may have if the well fails to meet the requirements. Generally, wells may be accepted if the misalignment does not interfere with the installation or operation of the pump or uniform placement of grout.

(h) Casing Perforations.

The placement of perforations in the well casing shall:

(i) be located, as far as practical, to permit the uniform

collection of water around the circumference of the well casing; and,

(ii) be of dimensions and size to restrain the water bearing soils from entrance into the well.

(i) Well Sealing Techniques and Requirements.

For all public drinking water wells, the annulus between the outermost well casing and the borehole wall shall be sealed with grout to a depth of at least 100 feet below the ground surface unless an "exception" is issued by the Director (see R309-500-4(1)). If more than one casing is used, including a conductor casing, the annulus between the outermost casing and the next inner casing shall be sealed with grout (meeting the sealing materials requirements of R309-515-6(i)(ii) herein) or with a water tight steel ring having a thickness equal to that of the permanent well casing and continuously welded to both casings. If a public drinking water well will be equipped with a pitless adapter or unit, a well seal shall be installed to a minimum depth of 110 feet to take into account the top 10 feet of compromised seal interval.

The following shall apply to all drinking water wells:

(i) Consideration During Well Construction.

(A) Sufficient annular opening shall be provided to permit a minimum of two inches of grout between the outermost permanent casing and the drilled hole, taking into consideration any joint couplings.

(B) The casing(s) must be placed to permit unobstructed flow and uniform thickness of grout.

(ii) Sealing Materials.

(A) Neat Cement Grout.

Cement, conforming to ASTM Standard C150, and water, with no more than six gallons of water per sack of cement, shall be used for two-inch openings. Additives may be used to increase fluidity subject to approval by the Director.

(B) Concrete Grout.

Equal parts of cement conforming to ASTM Standard C150, and sand, with not more than six gallons of water per sack of cement, may be used for openings larger than two inches.

(C) Clay Seal.

Where an annular opening greater than six inches is available, a seal of swelling bentonite meeting the requirements of R655-4-11.4.2 may be used when approved by the Director.

(iii) Application.

(A) When the annular opening is less than four inches, grout shall be installed under pressure, by means of a positive displacement grout pump, from the bottom of the annular opening to be filled.

(B) When the annular opening is four or more inches and 100 feet or less in depth, and concrete grout is used, it may be placed by gravity through a grout pipe installed to the bottom of the annular opening in one continuous operation until the annular opening is filled.

(C) All temporary construction casings shall be removed prior to or during the well sealing operation. Any exceptions shall be approved by the State Engineer's Office, and evidence of State Engineer's Office's approval shall be submitted to the Director (see R655-4-11.4.3.1 for conditions concerning leaving temporary surface casing in place). A temporary construction casing is a casing not intended to be part of the permanent well.

(D) When a "well in a protected aquifer" classification is desired, the grout seal shall extend from the ground surface down to at least 100 feet below the surface, and through the protective clay layer (see R309-600-6(1)(x)).

(E) After cement grouting is applied, work on the well shall be discontinued until the cement or concrete grout has

properly set, usually a period of 72 hours.

(j) Water Entered Into Well During Construction.

Any water entering a well during construction shall not be contaminated and should be obtained from a chlorinated municipal system. Where this is not possible, the water must be treated to produce a 100 mg/l free chlorine residual in accordance with R655-4-11.6.5.

(k) Gravel Pack Wells.

The following shall apply to gravel packed wells:

(i) the gravel pack material shall be of well-rounded particles, at least 90 percent siliceous material, no more than five percent acid solubility, smooth and uniform, free of foreign material, properly sized, washed, and then disinfected immediately prior to or during placement;

(ii) the gravel pack shall be placed in one uniform continuous operation;

(iii) refill pipes, when used, shall be Schedule 40 steel pipe incorporated within the pump foundation and terminated with screwed or welded caps at least 12 inches above the pump house floor or concrete apron;

(iv) refill pipes located in the grouted annular opening shall be surrounded by a minimum of 1.5 inches of grout;

(v) protection shall be provided to prevent leakage of grout into the gravel pack or screen; and,

(vi) any casings not withdrawn entirely shall meet requirements of R309-515-6(6)(b) or R309-515-6(6)(c).

(7) Well Development.

(a) Every well shall be developed to remove the native silts and clays, drilling mud, or finer fraction of the gravel pack.

(b) Development should continue until the maximum specific capacity is obtained from the completed well.

(c) Where chemical conditioning is required, the specifications shall include provisions for the method, equipment, chemicals, testing for residual chemicals, and disposal of waste and inhibitors.

(d) Where blasting procedures may be used, the specifications shall include the provisions for blasting and cleaning. Special attention shall be given to assure that the grouting and casing are not damaged by the blasting.

(8) Capping Requirements.

(a) The well shall be securely capped in accordance with R655-4-14.1 until permanent equipment can be installed.

(b) At all times during the progress of work, the contractor shall provide protection to prevent tampering with the well or entrance of foreign materials.

(9) Well Abandonment.

(a) Test wells and groundwater sources, which will be permanently abandoned shall be abandoned in accordance with R655-4-14.

(b) Wells to be abandoned shall be sealed to prevent undesirable exchange of water from one aquifer to another. Preference shall be given to using a neat cement grout. Where fill materials are used, which are other than cement grout or concrete, they shall be disinfected and free of foreign materials. When an abandoned well is filled with cement-grout or concrete, these materials shall be applied to the well-hole through a pipe, tremie, or bailer.

(10) Well Assessment.

(a) Step Drawdown Test.

Preliminary to the constant-rate test required below, it is recommended that a step-drawdown test (uniform increases in pumping rates over uniform time intervals with single drawdown measurements taken at the end of the intervals) be conducted to determine the maximum pumping rate for the desired intake setting.

(b) Constant-Rate Test.

A "constant-rate" yield and drawdown test shall:

(i) be performed on every production well after well

development and prior to placement of the permanent pump;

(ii) have the test methods clearly indicated in the specifications;

(iii) have a test pump with sufficient capacity that when pumped against the maximum anticipated drawdown, it will be capable of pumping in excess of the desired design discharge rate;

(iv) provide for continuous pumping for at least 24 hours or until stabilized drawdown has continued for at least six hours when test pumped at a "constant-rate" equal to the desired design discharge rate;

(v) provide the following data:

(A) capacity vs. head characteristics for the test pump (manufacturer's pump curve);

(B) static water level (in feet to the nearest tenth, as measured from an identified datum; usually the top of casing);

(C) depth of test pump intake; and,

(D) time and date of starting and ending test(s);

(vi) For the "constant-rate" test, provide the following at time intervals sufficient for at least ten essentially uniform intervals for each log cycle of the graphic evaluation required below:

(A) record the time since starting test (in minutes);

(B) record the actual pumping rate;

(C) record the pumping water level (in feet to the nearest tenth, as measured from the same datum used for the static water level);

(D) record the drawdown (pumping water level minus static water level in feet to the nearest tenth);

(E) provide graphic evaluation on semi-logarithmic graph paper by plotting the drawdown measurements on the arithmetic scale at locations corresponding to time since starting test on the logarithmic scale; and,

(vii) Immediately after termination of the constant-rate test, and for a period of time until there are no changes in depth to water level measurements for at least six hours, record the following at time intervals similar to those used during the constant-rate pump test:

(A) time since stopping pump test (in minutes),

(B) depth to water level (in feet to the nearest tenth, as measured from the same datum used for the pumping water level).

(c) Safe Yield.

If the aquifer drawdown test data show that the drawdown has stabilized, the Director will consider 2/3 of the pumping rate used in the constant-rate test as the safe yield of the well. The safe yield is used to determine the number of permanent residential connections or ERCs that a well source can support.

(11) Well Disinfection.

Every new, modified, or reconditioned well including pumping equipment shall be disinfected before being placed into service for drinking water use. These shall be disinfected according to AWWA Standards C654-03 and A100-06 as modified to incorporate the following as a minimum standard:

(i) the well shall be disinfected with a chlorine solution of sufficient volume and strength and so applied that a concentration of at least 50 parts per million is obtained in all parts of the well and the equipment installed in the well. This solution shall remain in the well for a period of at least eight hours; and,

(ii) a satisfactory bacteriologic water sample analysis shall be obtained prior to the use of water from the well in a public water system.

(12) Well Equipping.

(a) Naturally Flowing Wells.

Naturally flowing wells shall:

(i) have the discharge controlled by valves;

(ii) be provided with permanent casing and sealed by

grout; and,

(iii) if erosion of the confining bed adjacent to the well appears likely, special protective construction may be required by the Director.

(b) Well Pumps.

(i) The design discharge rate of the well pump shall not exceed the rate used during the constant-rate aquifer drawdown test.

(ii) Wells equipped with line shaft pumps shall:

(A) have the casing firmly connected to the pump structure or have the casing inserted into the recess extending at least 0.5 inches into the pump base;

(B) have the pump foundation and base designed to prevent fluids from coming into contact with joints between the pump base and the casing;

(C) be designed such that the intake of the well pump is at least ten feet below the maximum anticipated drawdown elevation; and,

(D) avoid the use of oil lubrication for pumps with intake screens set at depths less than 400 feet (see R309-105-10(7) and/or R309-515-8(2) for additional requirements of lubricants).

(iii) Where a submersible pump is used:

(A) the top of the casing shall be effectively sealed against the entrance of water under all conditions of vibration or movement of conductors or cables;

(B) the electrical cable shall be firmly attached to the riser pipe at 20-foot intervals or less; and,

(C) the intake of the well pump must be at least ten feet below the maximum anticipated drawdown elevation.

(c) Pitless Well Units and Adapters.

If the excavation surrounding the well casing allowing installation of the pitless unit compromises the surface seal, the competency of the surface seal shall be restored. Torch-cut holes in the well casing shall be to neat lines closely following the outline of the pitless adapter and completely filled with a competent weld with burrs and fins removed prior to the installation of the pitless unit and adapter.

Pitless well units and adapters shall:

(i) be used to make a connection to a water well casing that is made below the ground. A below-the-ground connection shall not be submerged in water during installation;

(ii) terminate at least 18 inches above final ground elevation or three feet above the highest known flood elevation, whichever is greater;

(iii) contain a label or have a certification indicating compliance with the Water Systems Council Pitless Adapter Standard (PAS-97);

(iv) have suitable access to the interior of the casing in order to disinfect the well;

(v) have a suitable sanitary seal or cover at the upper terminal of the casing that will prevent the entrance of any fluids or contamination, especially at the connection point of the electrical cables;

(vi) have suitable access so that measurements of static and pumped water levels in the well can be obtained;

(vii) allow at least one check valve within the well casing;

(viii) be furnished with a cover that is lockable or otherwise protected against vandalism or sabotage;

(ix) be shop-fabricated from the point of connection with the well casing to the unit cap or cover;

(x) be of watertight construction throughout;

(xi) be constructed of materials at least equivalent to and having wall thickness compatible to the casing;

(xii) have field connection to the lateral discharge from the pitless unit of threaded, flanged, or mechanical joint connection;

(xiii) be threaded or welded to the well casing. If the connection to the casing is by field weld, the shop-assembled unit must be designed specifically for field welding to the casing. The only field welding permitted on the pitless unit is to connect the pitless unit to the casing; and,

(xiv) have an inside diameter as great as that of the well casing, up to and including casing diameters of 12 inches, to facilitate work and repair on the well, pump, or well screen.

(d) Well Discharge Piping.

The discharge piping shall:

(i) be designed so that the friction loss will be low;

(ii) have control valves and appurtenances located above the pump house floor when an above-ground discharge is provided;

(iii) be protected against the entrance of contamination;

(iv) be equipped with a smooth-nosed sampling tap, a check valve, a pressure gauge, a means of measuring flow, and a shutoff valve (with the smooth-nosed sampling tap being the first item from the well head and the shut-off valve as the last item), unless it is a naturally flowing well which may need an alternative design;

(v) where a well pumps directly into a distribution system, be equipped with an air release vacuum relief valve located upstream from the check valve, with exhaust/relief piping terminating in a down-turned position at least six inches above the well house floor and covered with a No. 14 mesh corrosion resistant screen. An air release vacuum relief valve is not required if the specific proposed well head valve and piping design includes provisions for pumping to waste all trapped air before water is introduced into the distribution system;

(vi) have all exposed piping valves and appurtenances protected against physical damage and freezing;

(vii) be properly anchored to prevent movement;

(viii) be properly protected against surge or water hammer; and,

(ix) if a pump to waste line exists, it shall not be connected to a sewer/storm drain without a minimum 12-inch clearance to the flood rim, and the discharge end of the pump-to-waste line shall be downturned and covered with a No. 4 mesh corrosion resistant screen (refer to R309-545-10(1)).

(e) Water Level Measurement.

(i) Provisions shall be made to permit periodic measurement of water levels in the completed well.

(ii) Where permanent water level measuring equipment is installed, it shall be made using corrosion resistant materials attached firmly to the drop pipe or pump column and installed to prevent entrance of foreign materials.

(f) Observation Wells.

Observation wells shall be:

(i) constructed in accordance with the requirements for permanent wells if they are to remain in service after completion of a water supply well; and,

(ii) protected at the upper terminal to preclude entrance of foreign materials.

(g) Electrical Protection.

Sufficient electrical controls shall be placed on all pump motors to eliminate electrical problems due to phase shifts, surges, lightning, etc.

(13) Well House Construction.

The use of a well house is strongly recommended, particularly in installations utilizing above ground motors.

In addition to applicable provisions of R309-540, well pump houses shall conform to the following:

(a) Casing Projection Above Floor.

The permanent casing for all ground water wells shall project at least 12 inches above the pump house floor or concrete apron surface and at least 18 inches above the final ground surface. However, casings terminated in underground

vaults may be permitted if the vault is provided with a "drain-to-daylight" sized to handle in excess of the well flow and surface runoff is directed away from the vault access.

(b) Floor Drain.

Where a well house is constructed, the floor surface shall be at least six inches above the final ground elevation and shall be sloped to provide drainage. A "drain-to-daylight" shall be provided unless highly impractical.

(c) Earth Berm.

Sites subject to flooding shall be provided with an earth berm terminating at an elevation at least two feet above the highest known flood elevation or other suitable protection as determined by the Director.

(d) Well Casing Termination at Flood Sites.

The top of the well casing at sites subject to flooding shall terminate at least three feet above the 100-year flood level or the highest known flood elevation, whichever is higher (refer to R309-515-6(6)(b)(vi)).

(e) Miscellaneous.

The well house shall be ventilated, heated, and lighted in such a manner as to assure adequate protection of the equipment (refer to R309-540-5(2) (a) through (h)).

(f) Fencing.

Where necessary to protect the quality of the well water, the Director may require that certain wells be fenced in a manner similar to fencing required around spring areas.

(g) Access.

An access shall be provided either through the well house roof or sidewalls in the event the pump must be pulled for replacement or servicing the well.

R309-515-7. Ground Water - Springs.

(1) General.

Springs vary greatly in their characteristics and they should be observed for some time prior to development to determine any flow and quality variations. Springs determined to be under the direct influence of surface water shall comply with surface water treatment requirements.

(2) Source Protection.

Public drinking water systems are responsible for protecting their spring sources from contamination. The selection of a spring shall only be made after consideration of the requirements of R309-515-4. Springs must be located in an area that shall minimize threats from existing or potential sources of pollution. A Preliminary Evaluation Report on source protection issues is required by R309-600-13(2). If certain precautions are taken, sewer lines may be permitted within a public drinking water system's source protection zones at the discretion of the Director. When sewer lines are permitted in protection zones both sewer lines and manholes shall be specially constructed as described in R309-515-6(4).

(3) Surface Water Influence.

Some springs yield water that has been filtered underground for years; other springs yield water that has been filtered underground only a matter of hours. Even with proper development, the untreated water from certain springs may exhibit turbidity and high coliform counts. This indicates that the spring water is not being sufficiently filtered in underground travel. If a spring is determined to be under the direct influence of surface water, it shall be treated to meet the surface water treatment requirements specified in R309-505-6.

(4) Pre-construction Submittal

Before beginning spring development construction, the following information shall be submitted to the Director and approved in writing:

- (a) detailed plans and specifications covering the development work;
- (b) if available, a copy of an engineer's or geologist's

statement indicating:

- (i) the historical record of spring flow variation;
 - (ii) expected minimum flow and the time of year it will occur;
 - (iii) expected maximum flow and the time of year it will occur;
 - (iv) expected average flow and,
 - (v) the behavior of the spring during drought conditions;
 - (c) acceptable evidence that the water system has a legal right to divert water for the proposed use(s) from the spring source(s);
 - (d) a Preliminary Evaluation Report on source protection issues as required by R309-600-13;
 - (e) a copy of the chemical analyses required by R309-515-4(5) ; and,
 - (f) an assessment of whether the spring is under the direct influence of surface water (refer to R309-505-7(1)(a)).
- (5) Information Required after Spring Development.
- After development of a spring as a drinking water source, the following information shall be submitted to the Director for review.

- (a) proof of satisfactory bacteriologic quality;
- (b) information on the rate of flow developed from the spring.

Immediately after spring development, the water system shall collect monthly spring flow data during operating seasons when the spring is reasonably accessible, as a minimum, for three years, and submit spring flow data to the Director for determination of spring yield. After evaluating the spring flow information including seasonal and annual variations, the Director will determine a spring yield, which will be used in assessing the number of and type of connections that can be served by the spring. The spring yield typically is set at the 25th percentile of the spring flow data. If the spring exhibits significant seasonal or annual variations, the spring yield may be assessed on a case-by-case basis.

- (c) Record drawings of spring development.
- (6) Operating Permit Required.

Water from the spring can be introduced into a public water system only after it has been approved for use, in writing, as evidenced by the issuance of an Operating Permit by the Director (see R309-500-9).

(7) Spring Development.

The development of springs for drinking water purposes shall comply with the following requirements.

- (a) The spring collection device, whether it be collection tile, perforated pipe, imported gravel, infiltration boxes, or tunnels must be covered with a minimum of 10 feet of relatively impervious soil cover. Such cover must extend a minimum of 15 feet in all horizontal directions from the spring collection device. Clean, inert, non-organic material shall be placed in the vicinity of the collection device(s).

- (b) Where it is impossible to achieve the 10 feet of relatively impervious soil cover, an acceptable alternate will be the use of an impermeable liner provided that:

- (i) the liner has a minimum thickness of at least 40 mils;
- (ii) all seams in the liner are folded or welded to prevent leakage;
- (iii) the liner is certified as complying with ANSI/NSF Standard 61. This requirement is waived if certain that the drinking water will not contact the liner;
- (iv) the liner is installed in such a manner as to assure its integrity. No stones, two inch or larger or sharp edged, shall be located within two inches of the liner;
- (v) a minimum of two feet of relatively impervious soil cover is placed over the impermeable liner; and,
- (vi) the soil and liner cover are extended a minimum of

15 feet in all horizontal directions from the collection devices.

(c) Each spring collection area shall be provided with at least one collection box to permit spring inspection and testing.

(d) All junction boxes and collection boxes, must comply with R309-545 with respect to access openings, venting, and tank overflow. Lids for these spring boxes shall be gasketed and the box adequately vented.

(e) The spring collection area shall be surrounded by a fence located a distance of 50 feet (preferably 100 feet if conditions allow) from all collection devices on land at an elevation equal to or higher than the collection device, and a distance of 15 feet from all collection devices on land at an elevation lower than the collection device. The elevation datum to be used is the surface elevation at the point of collection. The fence shall be at least "stock tight" (see R309-110). In remote areas where no grazing or public access is possible, an exception to the fencing requirement may be granted by the Director. In populated areas, a six-foot high chain link fence with three strands of barbed wire may be required.

(f) Within the fenced area all vegetation having deep roots shall be removed by a means not negatively affecting water quality.

(g) A diversion channel, or berm, capable of diverting all anticipated surface water runoff away from the spring collection area shall be constructed immediately inside the fenced area.

(h) A permanent flow-measuring device shall be installed. Flow measurement devices such as critical depth meters or weirs shall be properly housed and otherwise protected.

(i) The spring shall be developed as thoroughly as possible to minimize the possibility of excess spring water ponding within the collection area. Where the ponding of spring water is unavoidable, the excess shall be collected by shallow piping or french drain, and be routed beyond and down grade of the fenced area required above, whether or not a fence is in place.

approval will be given only if the algicide is certified as meeting the requirements of ANSI/NSF Standard 60, Water Treatment Chemicals - Health Effects.

KEY: drinking water, source development, source maintenance

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R309-515-8. Operation and Maintenance.

(1) Spring Collection Area Maintenance.

(a) Spring collection areas shall be periodically (preferably annually) cleared of deep-rooted vegetation to prevent root growth from clogging collection lines. Frequent hand or mechanical clearing of spring collection areas and diversion channel is strongly recommended. It is advantageous to encourage the growth of grasses and other shallow rooted vegetation for erosion control and to inhibit the growth of more detrimental flora.

(b) No pesticide (e.g., herbicide) may be applied on a spring collection area without the prior written approval of the Director. Such approval can be granted only when:

(i) acceptable pesticides are proposed

(ii) the pesticide product manufacturer certifies that no harmful substance will be imparted to the water and,

(iii) spring development construction meets the requirements of these rules.

(2) Pump Lubricants.

The U.S. Food and Drug Administration (FDA) has approved propylene glycol and certain types of mineral oil for occasional contact with or for addition to food products. These oils are commonly referred to as "food-grade mineral oils". All oil lubricated pumps shall utilize food grade mineral oil suitable for human consumption as determined by the Director.

(3) Algicide Treatment.

No algicide shall be applied to a drinking water source unless specific approval is obtained from the Director. Such

R309. Environmental Quality, Drinking Water.
R309-520. Facility Design and Operation: Disinfection.
R309-520-1. Purpose.

This rule specifies requirements for facilities that disinfect public drinking water. It is to be applied in conjunction with Rule Series 500, Drinking Water Facility Construction, Design, and Operation, namely, R309-500 through R309-550. Collectively, these Rules govern the design, construction, and operation and maintenance of public drinking water system facilities. These Rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water that consistently meet applicable drinking water quality requirements and do no harm to general public health.

R309-520-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-520-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-520-4. Primary Disinfectants.

Primary disinfection is the means to provide adequate levels of inactivation of pathogenic micro organisms within the treatment process. The effectiveness of chemical disinfectants is measured as a function of the concentration and time of contact, a "CT" value in units such as mg/L-min. The effectiveness of UV disinfection is determined through validation testing of each model and specific configuration of UV reactor proposed in the design, as described in R309-520-8.

Only four disinfectants: chlorine (i.e., gas, hypochlorite solution, and hypochlorite tablets), ozone, ultraviolet light, and chlorine dioxide are approved herein as allowable primary disinfectants of drinking water.

R309-520-5. Secondary Disinfectants.

Secondary disinfection is the means to provide an adequate disinfectant residual in the distribution system to maintain a chemical barrier and to control bacteriological quality of treated water.

The effectiveness of secondary chemical disinfection is measured through maintaining a detectable disinfectant residual throughout the distribution system. Allowable secondary disinfectants are chlorine (gas, hypochlorite solution, and hypochlorite tablets) and chloramine.

R309-520-6. General.

(1) Continuous Disinfection.

Continuous disinfection is required of all ground water sources that do not otherwise continuously meet standards of bacteriologic quality. Intermittent or batch disinfection, commonly used for disinfecting new water tanks, waterlines, well casings, etc., is not acceptable for ongoing drinking water delivery service. Surface water sources, and ground water sources under direct influence (UDI) of surface water, shall be disinfected as a part of the treatment requirements for conventional surface water treatment or alternative surface water treatment.

Disinfection is not an acceptable remedy to inadequate drinking water system facilities. Systems that practice source disinfection, and whose sources are exclusively ground water sources, as defined in R309-505-8, shall meet the requirements of R309-105-10(1), Chemical Addition.

(2) ANSI/NSF Standard 60 Certification.

All chemicals, including chlorine (i.e., gas, hypochlorite solution, hypochlorite tablets, granules, and powder), chloramines, and chemicals used to generate chlorine dioxide, added to drinking water supplied by a public water system shall be certified as complying with ANSI/NSF Standard 60, Drinking Water Treatment Chemicals.

(3) Appropriate Use of Primary and Secondary Disinfectants.

Surface water, or groundwater under the direct influence of surface water, shall be filtered and disinfected.

Only ground water not under the influence of surface water can be adequately disinfected with primary disinfectants, or primary and secondary disinfectants, alone. Surface waters, as well as ground water under the direct influence of surface water, require conventional surface water treatment or alternative surface water treatment methods.

(4) Required Disinfectant Dose and Contact Time.

Minimum cyst and virus reductions for that approved primary chemical disinfectants must achieve are specified in R309-200-5(7)(a), Disinfection, and reiterated in R309-200-7(2), namely 4-log virus removal or inactivation, 3-log *Giardia lamblia* cyst removal or inactivation, and 2-log *Cryptosporidium* removal or inactivation for water sources in bin 1 classification per R309-215-15(11)(c). Minimum doses and contact times for primary chemical disinfectants are standardized as "CT" values as defined in R309-110-4, Definitions.

(5) Site Selection.

Disinfection installations shall be sited to permit convenient year-round access. These installations shall initially be sited with due consideration of possible danger to nearby population and of possible jeopardy from seismic fault zones.

R309-520-7. Chlorine.

(1) General Requirements for all Chlorination Installations.

(a) Chemical Types.

Disinfection by chlorination shall be accomplished by gaseous chlorine or liquid solutions of calcium hypochlorite or sodium hypochlorite.

(b) Feed Equipment.

Solution-feed gas type chlorinators, direct-feed gas type chlorinators or hypochlorite liquid feeders of a positive displacement type shall be provided. Solution-feed gas type chlorinators are preferred. However, for small supplies requiring less than four pounds per day, liquid hypochlorite feed systems are advised.

(c) Chlorine Feed Capacity.

The design of each chlorinator shall permit:

(i) the chlorinator capacity to be such that a free chlorine residual of at least 2 mg/l can be maintained in the system after 30 minutes of contact time during peak demand. The equipment shall be of such design that it will operate accurately over a feeding range of 0.2 mg/l to 2 mg/l.

(ii) assurance that a detectable residual, either combined or free, can be maintained at all times, at all points within the intended area in the distribution system.

(d) Automatic Proportioning.

Automatic proportioning chlorinators shall be required where the rate of flow of the water to be treated or chlorine demand of the water to be treated is not reasonably constant.

(e) Injector/diffuser.

(i) Location. The chlorine solution injector/diffuser shall be compatible with the point of application to provide a rapid and thorough mix with all the water being treated. The center of a pipeline is the preferred application point.

(ii) Equipment. Each injector selected shall be

appropriate to the intended point of application with particular attention given to the quantity of chlorine to be added, the maximum injector water flow, the back pressure of the to-be-treated water flow, the injector operating pressure, and the size of the chlorine solution line. Gauges for measuring water pressure at the inlet and outlet of each injector shall be provided.

(iii) Protection. A suitable screen to prevent small debris from clogging a chlorine injector shall be provided on each water feed line. Provision for flushing of the screen is required.

(f) Contact Time and Point of Application.

(i) Due consideration shall be given to the contact time of the chlorine in water with relation to pH, ammonia, taste producing substances, temperature, biological quality, and other pertinent factors.

(ii) Where possible, the design shall minimize the formation of chloro-organic compounds. At plants treating surface water or ground water under the direct influence of surface water, provisions shall be made for applying chlorine to raw water, applied water, filtered water, and water entering the distribution system.

(iii) When treating ground water, provisions shall be made for applying chlorine to at least a reservoir inlet or transmission pipeline which will provide sufficient contact time.

(iv) Care must be taken to assure that the point of application will, in conjunction with the pipe and tank configuration of the water system, allow required CT values to be achieved prior to the first consumer connection.

(g) Minimization of Chlorinated Overflow.

The chlorinator and associated water delivery facilities shall be designed so as to minimize the release of chlorinated water into the environment, for example, discharge chlorinated water from tank overflows. Such release must comply with rules of Division of Water Quality that pertains to discharge or pollution.

(h) Feed Water Piping.

The chlorinator water supply piping shall be designed to prevent contamination of the treated water supply by make-up water of lesser quality. At all facilities treating surface water, pre-chlorination and post-chlorination systems shall be independent where pre-chlorination chlorine solution make-up water is not finished water. All chlorine solution make-up water shall be at least of equal quality to the water receiving the chlorine solution.

(i) Flow Measurement.

The chlorination system design shall have a means to measure the flow rate of treated water, which is critical to operation of flow-proportioned disinfectant dosing.

(j) Residual Testing Equipment.

Chlorine residual test equipment, in accordance with the analytical methods in "Standard Methods for the Examination of Water and Wastewater," shall be provided and shall be capable of measuring residuals to the nearest 0.1 mg/l in the range below 0.5 mg/l, to the nearest 0.3 mg/l between 0.5 mg/l and 1.0 mg/l and to the nearest 0.5 mg/l above 1.0 mg/l.

(k) Standby and Backup Equipment.

A spare parts kit shall be provided and maintained for all chlorinators to repair parts subject to wear and breakage. If there could be a large difference in feed rates between routine and emergency dosages, multiple gas metering tubes shall be provided, at least one for each dose range, to assure accurate control of the chlorine feed under both routine and emergency conditions. Where chlorination is required for disinfection of a water supply, standby equipment of sufficient capacity shall be available to replace the largest unit in the event of its failure. Standby power shall be available, during power outages, for operation of chlorinators where disinfection of

the water supply is required.

(l) Heating, Lighting, Ventilation.

Chlorinator houses shall be heated, lighted and ventilated as necessary to assure proper operation of the equipment and to facilitate its serviceability.

(m) Bypass-to-Waste Capability of Chlorine Disinfection Systems.

A chlorinator bypass, with appropriate turn-out of unchlorinated water, shall be provided to allow the flow to waste for periods when the chlorination system is not operational. This is necessary to prevent unchlorinated water from entering the distribution system. The flow to waste shall be designed such that it does not result in unintended consequences such as flooding or property damage.

(n) Isolation Capability.

Chlorinator isolation plumbing shall be provided such that each chlorinator can be removed from the process train (e.g., during maintenance, power outage, other shutdown, etc.) without allowing otherwise unchlorinated water to bypass the unit and be delivered to the public for consumption.

(2) Additional Requirement for Gas Chlorinators.

(a) Automatic Switch over.

Automatic Switch over of chlorine cylinders shall be provided, where necessary, to assure continuous disinfection.

(b) Injector and Eductor.

Each injector or eductor shall be selected for the point of application with particular attention given to the quantity of chlorine to be added, the maximum injector or eductor water flow, the total discharge back pressure, the injector operating pressure, and the size of the chlorine solution line. Gauges for measuring water pressure at the inlet and outlet of each injector shall be provided.

(c) Gas Scrubbers.

Gas chlorine facilities shall conform with the Uniform Fire Code, Article 80 and the Uniform Building Code, Chapter 9 as they are applied by local jurisdictions in the state. Furthermore, local toxic gas ordinances shall be complied with if they exist.

(d) Heat.

The design of the chlorination room shall assure that the temperature in the room will never fall below 32 degrees F or that temperature required for proper operation of the chlorinator, whichever is greater.

(e) Ventilation.

Chlorination equipment rooms which contain chlorine cylinders, tanks, equipment and gaseous chlorine lines under pressure shall have at least one exhaust fan and shall be constructed and equipped such that:

(i) chlorine room exhaust fan(s), when operating, shall provide at least one complete room air change per minute;

(ii) chlorine room ventilating fan(s) shall take suction inside the chlorine room near the floor, as far as practical from the door and air inlet, and exhaust air out of the room with the point of discharge so located as not to contaminate air inlets of any other rooms or any structures;

(iii) chlorine room air entryways shall be through wall louvers near the ceiling;

(iv) chlorine room air entryway louvers and air exit-way louvers (e.g., on outside faceplate of any floor level exhaust fan) shall have air-tight closure;

(v) separate switches for the chlorine room fans and lights shall be outside of the chlorine room near the entrance to the room, and shall be protected from vandalism; and

(v) vents from feeders and storage discharge above grade to the outside atmosphere.

(f) Feeder Vent Line.

The vent hose from the feeder shall discharge to the outside atmosphere above grade at a point least susceptible to

vandalism and shall have the end covered with a No. 14 mesh non-corrodible screen.

(g) Housing.

Adequate housing shall be provided for the chlorination equipment and for storing the chlorine (see R309-520-10(1)(l) above).

(h) Housing at Water Treatment Plants.

A separate room, referred to as the chlorine room, for chlorine cylinders and feed equipment, shall be provided at all water treatment plants. Chlorine gas feed and storage shall be enclosed in the chlorine room and separated from other operating areas. The chlorine room shall have:

(i) shatter resistant inspection window(s) installed in an interior wall and preferably located so that an operator may read the weighing scales without entering the chlorine room,

(ii) construction such that all openings between the chlorine room and the remainder of the plant are sealed, and

(iii) outward-opening doors equipped with panic bars to facilitate a means of easy and rapid exit to the building exterior.

(iv) floor drains shall be discouraged but, where provided, these floor drains shall discharge to the outside of the building and shall not be connected to other internal or external drain systems.

(i) Cylinder Security.

Full and empty cylinders of liquefied chlorine gas and ammonia gas shall be stored in rooms separate from each other, and shall be:

(i) isolated from operating areas;

(ii) restrained in position to prevent upset from accidental bumping, seismic event or other such circumstance;

(iii) stored in areas not in direct sunlight or not exposed to excessive heat.

(j) Feed Line Routing.

Chlorine feed lines shall not carry pressurized chlorine gas beyond the chlorinator room. Only vacuum lines may be routed to other portions of the building outside the chlorine room. Any openings for these lines must be adequately sealed.

(k) Weighing Scales.

Scales shall be provided for determining chlorine cylinder weight. Scales should be of a corrosion resistant material and should be placed in a location remote from any moisture. Scales shall be accurate enough to indicate loss of weight to the nearest one pound for 150 pound cylinders and to the nearest 10 pounds for one ton cylinders.

(l) Pressure Gauges.

Pressure gauges shall be provided on the inlet and outlet of each chlorine injector. Water pressures at the inlet and outlet of each chlorine injector shall be accurately measured. The preferred location is on the water feed line immediately before the inlet of the chlorine injector and at a point on the water main just ahead of chlorine injection. These locations should give accurate pressure readings while not being subjected to corrosive chlorinated water.

(m) Injector Protection.

A suitable screen to prevent small debris from clogging a chlorine injector shall be provided on the water feed line. Provision for flushing of the screen is required.

(n) Chlorine Vent Line Protection.

A non-corrodible fine mesh (No. 14 or finer) screen shall be placed over the discharge ends of all vent lines. All vent lines shall discharge to the outside atmosphere above grade and at locations least susceptible to vandalism.

(o) Gas Masks.

(i) Respiratory protection equipment, meeting the requirements of the National Institute for Occupational Safety and Health (NIOSH) shall be available where chlorine gas in

one-ton cylinders is handled, and shall be stored at a convenient location, but not inside any room where chlorine is used or stored. The units shall use compressed air, have at least a 30 minute capacity, and be compatible with units used by the fire department responsible for the plant.

(ii) Where smaller chlorine cylinders are used, suitable gas masks must be provided.

(p) Chlorine Leak Detection and Repair.

A bottle of Ammonium Hydroxide, 56% ammonia solution, shall be available for chlorine leak detection; where ton containers are used, a leak repair kit approved by the Chlorine Institute shall be provided. Continuous chlorine leak detection equipment is recommended. Where a leak detector is provided, it shall be equipped with both an audible alarm and a warning light.

(3) Additional Requirement for Hypochlorite Systems.

Disinfection by free chlorine shall be accomplished with stock hypochlorite solutions, hypochlorite solution produced by an on-site generator, or hypochlorite solutions prepared from hypochlorite tablets.

(a) Concentrated Sodium Hypochlorite Solutions.

(i) The concentrated sodium hypochlorite solutions used for drinking water treatment shall be certified as meeting the ANSI/NSF Standard 60.

(ii) Emergency eyewash stations or showers shall be provided at all hypochlorite installations where concentrated (e.g., above 5.25% strength) hypochlorite solutions are handled for dilution by operators or other personnel.

(iii) The storage and injection areas shall be designed to minimize the decay of the strength of the concentrated hypochlorite solution over time, such as minimize excessive heat or direct sunlight.

(b) On-Site Hypochlorite Solutions Generation.

The on-site hypochlorite generation systems used for drinking water treatment shall be certified as meeting the NSF/ANSI Standard 61. Manufacturer recommendations for safety with respect to equipment electrical power and other considerations for the ANSI/NSF Standard 61 certified on-site chlorine generation system shall be followed.

(c) Calcium Hypochlorite.

(i) The calcium hypochlorite tablets, granules, and powder forms, used for drinking water treatment shall be certified as meeting ANSI/NSF Standard 60.

(ii) The calcium hypochlorite dissolution systems for drinking water treatment shall be certified as meeting the ANSI/NSF Standard 61. The Director may grant an exception to this requirement on a case by case basis.

(iii) The design shall allow the calcium hypochlorite tablets to be stored in accordance with safety guidelines by the vendor or manufacturer, for example, in their original containers in a cool, dry, well-ventilated area. The calcium hypochlorite tablets shall not be stored near combustible materials and acids to avoid fire or the release of toxic gases.

(d) Hypochlorite Feed Equipment.

(i) Hypochlorite feed equipment shall generally conform with R309-525-11, Chemical Addition; with R309-525-6 for storage and safe handling; with R309-525-7 for feeder design, location, and control; with R309-525-8 for feeder appurtenances such as pumps, day tanks, bulk storage tanks, and feed lines; and R309-525-9 for make-up water supply and protection.

(ii) The hypochlorite feed equipment for drinking water treatment shall be certified meeting the ANSI/NSF Standard 61. The Director may grant an exception to this requirement on a case by case basis.

R309-520-8. Ultraviolet Light.

(1) General Requirements.

This rule shall apply to the public drinking water

systems that use ultraviolet (UV) disinfection for inactivation of *Cryptosporidium*, *Giardia*, and virus. The Director may reduce the requirements of monitoring and reporting on a case by case basis for the water systems that use UV as ancillary means of disinfection and do not claim credit for UV disinfection or for water systems using UV without a SCADA system and treating less than 30 gallons per minute.

Terminology used in this rule is based on the definitions in the EPA Ultraviolet Disinfection Guidance Manual for the Final Long Term 2 Enhanced Surface Water Treatment Rule (2006 Final UVDGM).

(a) Water systems using surface water or ground water under the influence of surface water shall not use UV as the sole means of disinfection. For these types of water systems, at least one alternative primary disinfectant must be used for virus disinfection, and a secondary disinfectant shall be provided to maintain a disinfectant residual in the distribution system.

(b) The following requirements apply to the water systems that wish to receive credit for UV disinfection:

(i) The water system shall submit a UV plan which clearly identifies the dose monitoring strategy, such as the UV intensity setpoint approach, the calculated dose approach or an alternative approach.

(ii) The water system shall identify the goals for the UV facility as part of a comprehensive disinfection strategy, including target pathogens, target log inactivation, and corresponding required UV dose per Table 215-5 in R309-215-15(19)(d).

(iii) The water system shall submit a UV reactor validation report in accordance with R309-520-8(2), to the Director for review prior to installation of UV facility.

(iv) The water system must demonstrate that the reactor is delivering the required UV dose using a validated dose monitoring system and continue to comply with the monitoring and reporting requirements specified in R309-215-15(19) and (20).

(2) Validation Testing.

The Director may accept a validation report that was conducted based on the 2003 draft UV Disinfection Guidance Manual on a case-by-case basis.

(a) Each model and specific configuration of UV reactor must undergo off-site, full-scale validation testing by an independent third party test facility prior to being approved for use. The validation testing shall be conducted in qualified test facilities that are deemed acceptable by NSF, EPA, or the Director.

(b) Validation testing results shall provide data, including calculations and tables or graphical plots, on dose delivery by the UV reactor under design conditions of flow rate, UV transmittance (UVT), UV intensity, lamp status, power ballast setting, as well as consideration of lamp aging and lamp fouling. The validation report shall demonstrate that the monitoring algorithm is valid over the range expected with the application. The data is used to define the dose monitoring algorithm for the UV reactor and the operating conditions that can be monitored by a utility to ensure that the UV dose required for a given pathogen inactivation credit is delivered.

(c) The UV reactor validation report shall include:

(i) Description of the reactor and validation test set-up, including general arrangement and layout drawings of the reactor and validation test piping arrangement.

(ii) Description of the methods used to empirically validate the reactor.

(iii) Description of the dose monitoring equation for the reactor to achieve the target pathogen inactivation credit and related graphical plots showing how the equation was derived from measured doses obtained through validation testing

under varying test conditions.

(iv) Range of validated conditions for flow, UVT, UV dose, and lamp status.

(v) Description and rationale for selecting the challenge organism used in validation testing, and analysis to define operating dose for pathogen inactivation credit.

(vi) Tabulated data, analysis, and Quality assurance/quality control (QA/QC) measures during validation testing.

(vii) A licensed professional engineer's third party oversight certification indicating that the testing and data analyses in the validation report are conducted in a technically sound manner and without bias.

(viii) The validation report shall be accompanied with completed Checklists 5.1 through 5.5 included in the EPA Ultraviolet Disinfection Guidance Manual for the Final Long Term 2 Enhanced Surface Water Treatment Rule (2006 Final UVDGM).

(3) Design Criteria

(a) A water system considering UV disinfection shall gather sufficient water quality data prior to design. The water samples shall be representative of the source water to be treated by the UV facility. Frequent testing may be required if significant variation or seasonal trending in water quality is expected.

(b) The following water quality parameters shall be considered in UV facility planning:

(i) UV Transmittance or UV Absorbance

(ii) Calcium

(iii) Alkalinity

(iv) Hardness

(v) Iron

(vi) Manganese

(vii) Turbidity

(viii) pH

(ix) Oxidation-Reduction Potential (ORP)

(x) Particle content and algae

(c) The design flow rate and UVT used to size the UV system shall be selected to provide the required dose at least 95 percent of the time, accounting for seasonal variations of flow and UVT combinations. Specifying a matrix of flow and UVT conditions for the UV reactors may be necessary.

(d) The water system may consider increasing the delivered dose beyond the required UV dose listed in Table 215-5 in R309-215-15(19)(d) to provide flexibility and conservatism.

(e) UV reactor inlet and outlet configurations shall meet the validated hydraulic distribution of flow conditions or be more hydraulically conservative. This can be achieved using one of the following approaches:

(i) The inlet and outlet configuration shall meet one of the conditions specified in Section 3.6.2 of the 2006 Final UVDGM.

(ii) Computational fluid dynamics (CFD)-based modeling may be used to demonstrate that the given conditions of inlet and outlet piping with the UV installation provides equal or greater dose delivery. The CFD modeling shall be conducted at the minimum and maximum values of the validated range of flow, UVT, and lamp status.

(f) The UV disinfection system shall be capable of applying the required design dose with a failed or out-of-service reactor. The design shall account for an on-line backup UV reactor or an operating scheme to apply the design dose with one reactor out of service.

(g) It shall be possible to isolate each reactor for maintenance.

(h) Signals and alarms shall be provided for the operation of the UV facility for the parameters necessary for dose monitoring algorithm, such as low UV dose, high flow

rate, low UVT, UVT monitoring failure, UV sensor failure, off specification event, Ground Fault Interrupt (GFI), high water temperature, and low water level.

(i) All materials used in constructing or coating the UV reactors that come in contact with water shall be certified NSF Standard 61 - Drinking Water System Components - Health Effects.

(j) Any chemicals used in the cleaning of the UV reactor components in contact with the drinking water such as quartz sleeves shall be certified as meeting the ANSI/NSF Standard 60 - Drinking Water Treatment Chemicals - Health Effects.

(k) A flow or time delay shall be provided to permit a sufficient time for tube warm-up, per manufacturer recommendations, before water flows from the unit upon start up. The flow or time delay shall be included in the design so they do not result in excessive off specification conditions.

(l) To ensure a continuous supply of power, a backup power supply of sufficient capacity shall be provided for the UV disinfection system. If power quality problems, such as frequent power interruptions or brownouts, or remote location with unknown power quality, is anticipated, power conditioning equipment, such as uninterruptible power supply (UPS), shall be included in the design.

(m) The design shall include a redundant disinfection mechanism that will apply an approved primary disinfectant to achieve the CT or log removal/inactivation required for compliance if a UV facility is off specification or offline within a maximum response time of 15 minutes. One example of such response is to shut down the off- specification UV train and either bring a parallel UV train on line or initiate a back-up primary disinfection system within 15 minutes, so the continuous duration of an off- specification event is limited to no more than 15 minutes.

(n) UV disinfection units rated at 30 gallons per minute or less shall be certified as meeting the ANSI/NSF Standard 55, Class A, or other equivalent or more stringent validation or certification standards that are deemed acceptable by the Director.

(o) The dose monitoring approach used for UV facility must be reviewed and accepted by the Director. Typically the calculated dose approach is suitable for large systems or systems with significant flow variation, and the UV intensity setpoint approach is for small systems or systems with fixed flow rate. The dose monitoring approaches need to be consistent with the guidelines stated in the 2006 Final UVDGM.

(p) If Programmable Logic Controller (PLC) or SCADA interface is used for UV reactor's process control, the programming shall be in accordance with the validated dose monitoring algorithm and the validated conditions. The algorithm shall use inputs of flow, UV intensity sensor readings, lamps status, and/or UVT equal to or more conservative than values measured during the operation of the UV system. If the measured UVT is above the validated range, the maximum validated UVT shall be used as the input to the dose algorithm. If the measured flow rate is below the validated range, the minimum validated flow rate shall be used as the input to the dose algorithm. If the dose algorithm uses relative lamp output determined from the UV intensity sensor readings as an input, the relative lamp output shall be based on the measured UVT, even if it exceeds the maximum validated UVT.

(q) The UV reactor's PLC or microprocessor shall be programmed to record off specification events for the following conditions:

- (i) Delivered UV dose less than the required dose,
- (ii) Flow greater than the validated range,
- (iii) UVT less than the validated range,
- (iv) Lamp status outside the validated range,

(v) Failure of UV sensors, flow meters, or on-line UVT monitors used in the dose calculation. Laboratory measurements of UVT may be used temporarily in the program until the on-line UVT monitor is repaired.

(4) Operation and Maintenance

The operation and maintenance tasks and the frequency of performing them can be specific to the UV equipment installed. The water systems with approved UV installations should follow the manufacturer's recommendation or the operation and maintenance guidelines stated in Section 6.2 through 6.5 of the 2006 Final UVDGM.

(a) Startup testing.

(i) The UV reactor manufacturer must provide a site-specific operation and maintenance manual, which shall include the procedure for starting up and shutting down the UV treatment system.

(ii) Provide schedules and performance standards for start-up testing and initial operation. Schedules shall include anticipated start-up date and proposed testing duration. Performance standards shall reference applicable regulations and specific equipment capabilities.

(iii) Operators shall receive site-specific training on the operation of the UV disinfection system.

(b) An incident plan shall be developed to address lamp breakage and release of mercury, response to alarms, power supply interruptions, activation of standby equipment, failure of systems, etc.

(c) To verify that the UV reactors are operated within the validated limits, selected parameters shall be monitored. The routine operation and maintenance shall include the monitoring and calibration requirements listed in R309-215-15(19) and (20) and are in accordance with the monitoring and reporting protocol approved by the Director. For very small UV systems, the Director may consider granting exception to allow reduced monitoring and reporting on a case-by-case basis.

R309-520-9. Ozone.

(1) General Requirements.

(a) Ozone is approved as a primary disinfectant, but is not approved as a secondary disinfectant for the distribution system because of its rapid decomposition in aqueous solution. A different disinfectant approved for secondary disinfection must be used if a minimum disinfection residual is required in the distribution system. Ozone may also be used for taste and odor control, oxidation of inorganic and organic compounds and for enhanced performance of other water treatment processes such as microflocculation and filtration. Some of the requirements of this section may not be applicable if ozone is used only for reasons other than primary disinfection.

(b) Pilot studies or bench scale studies shall be conducted for all surface waters unless there is sufficient data available from other studies performed on the same water source. The studies shall determine the initial ozone demand, the rate of ozone decay, the minimum and maximum ozone dosages for the range of water conditions for disinfection "CT" compliance, and the ozone dosage required for other desired benefits. Pilot studies or bench scale studies shall take into account the seasonal and other variations of the source water. Plans for pilot studies or bench scale studies shall be reviewed and accepted by the Director prior to commencement of the studies.

(2) Ozone Generation.

(a) The ozone system should be designed with backup capability such that required inactivation can be achieved with one generator out of service.

(b) The ozone generators shall be housed in an enclosed temperature controlled building for protection. Adequate

ventilation shall be provided in the building, and be capable of providing six or more air changes per hour when needed in case of an ozone leak.

(c) The ozone generators shall be of the medium or high frequency type.

(d) The power supply units for the ozone generators shall have a backup electrical power source, normally an emergency generator, or the system shall have an alternate primary disinfection system that may be used in case of an electrical power outage.

(e) The ozone generators shall be water-cooled with a maximum increase in cooling water temperature of 10 degrees F (5.6 degrees C). If necessary, the cooling water should be treated to minimize corrosion, scaling, and microbiological fouling of the water side of the tubes. A closed-loop cooling water system may be used to assure proper water conditions are maintained. The power supply units to the ozone generators may also be water cooled.

(f) The ozone generators shall comply with Section 3705 of Chapter 37, "Ozone Gas Generators," of the 2006 International Fire Code.

(3) Ozone Generator Feed Gas.

(a) Feed gas may be air, vaporized high purity liquid oxygen, or oxygen enriched air. Oxygen may be generated on-site or delivered in bulk. Oxygen-enriched air is typically generated on-site.

(b) The design of the feed gas system must ensure that the maximum dew point of the feed gas of -76 degrees F (-60 degrees C) is not exceeded at any time.

(c) Liquid Oxygen Feed Gas Systems.

(i) Liquid oxygen storage tanks shall be sized to provide a minimum of a 7-day supply to the ozone generators at the maximum operating rate.

(ii) There shall be two or more vaporizers to convert liquid oxygen to the gaseous form. Vaporizers must be capable of maintaining oxygen flow at the minimum design air temperature with one unit on standby.

(iii) Liquid oxygen storage tanks and system shall comply with Chapters 40, "Oxidizers," of the 2006 International Fire Code.

(d) Air or Oxygen Enriched Air Feed Gas Systems.

(i) There shall be two or more air compressors to supply air. The capacity of the compressors shall be such that the demand during maximum ozone production and for other compressed air uses at the treatment plant can be met when the largest compressor is out of service.

(ii) Entrainment separators, refrigeration dryers, desiccant dryers, and filters shall be used as necessary to provide a sufficiently dried, dust-free, and oil-free feed gas to the ozone generators. Multiple units of this equipment shall be used so that the ozone generation is not interrupted in the event of a breakdown.

(4) Ozone Contactors.

(a) An ozone contactor shall consist of two or more chambers to provide for introduction of ozone into the water and contact time. In a water treatment plant, ozone may be introduced in the raw water, or ozone may be introduced later in the process, such as to settled water after solids have been removed. An ozone contactor must be a closed vessel that is kept under less than atmospheric pressure to prevent escape of ozone gas. The materials of construction must be ozone-resistant to prevent premature failure of the contactor.

(b) Ozone gas may be injected into the water under positive pressure through bubble diffusers using porous-tube or dome diffusers. Alternatively, ozone gas may be injected into the water using side stream injection. This is where ozone gas is drawn into the side stream using negative pressure, which is generated in a pipe section with a venturi.

(c) An ozone contactor shall be designed to achieve a

minimum transfer efficiency of 85 percent.

(d) Multiple sampling points shall be provided in an ozone contactor to enable sampling of treated water for purposes of determining an accurate measure of the concentration to be used in the "CT" disinfection calculation.

(e) A recommended minimum disinfection contact time is ten minutes.

(f) Ozone contactors shall have provision for cleaning, maintenance, and drainage of the contactor. Each contactor chamber shall be equipped with an access hatchway or other means of entry.

(g) An ozone contactor shall have an emergency off-gas pressure/vacuum relief system to prevent damage to the unit.

(h) A system must be provided for worker safety at the end of the ozone contactor for compliance with OSHA standards. Specifically, ozone levels in the gas space above treated water that has exited the contactor must not exceed the established OSHA 8-hour exposure limit of 0.1 ppm. This system may be an ozone residual quenching system where a chemical is used to destroy remaining ozone in the water, or this system may be a monitoring system that provides sufficient time to lower the residual ozone level in the water by natural decay to an acceptable level. Any chemical used to quench residual ozone shall comply with ANSI/NSF Standard 60.

(5) Off-Gas Destruction Units.

(a) A system for treating the final off-gas from each ozone contactor must be provided in order to meet safety standards. Systems using thermal destruction or catalytic destruction may be used. At least two units shall be provided which are each capable of handling the entire off-gas flow.

(b) Exhaust blowers shall be provided in order to draw off-gas from the contactor into the destruction units.

(c) Provisions must be made to drain water from condensation in the off-gas piping and to protect the destruction units and piping from moisture and other impurities that may cause damage.

(d) The maximum allowable ozone concentration in the gas discharge from a destruction unit is 0.1 ppm by volume. Provisions may be made for temporary transient concentration spikes that may exceed this limit.

(6) Piping and Connections.

(a) Because ozone is a strong oxidant, consideration shall be given to piping materials used in ozone service. Generally, only low carbon 304L and 316L stainless steel should be used for ozone gas service.

(b) Connections on piping used for ozone service should be welded where possible. Threaded connections should be avoided for ozone gas piping because of their tendency to leak. Connections with meters, valves, or other equipment should be made with flanged joints with ozone-resistant gaskets.

(c) A positive-closing 90-degree turn isolation valve, or other equivalent means, shall be provided in the piping between an ozone generator and a contactor to prevent moisture from reaching the ozone generator during shutdowns.

(7) Instrumentation and Monitoring.

(a) A flow meter shall be provided to measure the flow rate of the water being treated. A temperature gauge or transmitter shall also be provided to measure the temperature of the water being treated. The pH shall also be measured to indicate changes in the water being treated.

(b) An ozone gas analyzer, a flow meter, and a temperature measurement shall be provided on the gaseous ozone feed line going to the ozone injection point.

(c) Ozone aqueous residual analyzers shall be provided to measure the ozone residual concentration in the water being treated in order to determine "CT" credit.

(d) An ozone gas analyzer shall be provided on the gas discharge of each ozone destruction unit, or combined vent gas discharge, to determine the exiting ozone concentration.

(e) Ambient ozone monitors shall be installed in the vicinity of the ozone generators, the ozone contactors, the ozone destruction units, and other areas where ozone gas may accumulate.

(f) A continuous dew point monitor shall be provided on the feed gas line to the ozone generators.

(g) Instrumentation such as pressure gauges, temperature gauges, flow meters, and power meters shall be provided as necessary to monitor the feed gas system, ozone generators, power supply units, and cooling water to protect the equipment and monitor performance.

(8) Alarms and Shutdowns.

(a) An ambient ozone monitor shall be provided.

(b) The design shall include alarms and shutdowns.

(9) Safety.

(a) Training shall be provided to the operators of ozone systems by the manufacturers of the ozone equipment, or other professionals with experience in ozone treatment, to promote the safe operation of the systems.

(b) Appropriate signs shall be installed around ozone and liquid oxygen equipment to warn operators, emergency responders, and others of the potential dangers.

(c) A means shall be provided, such as portable purge air blowers and portable monitors, to reduce residual ozone levels in an ozone contactor or other equipment to safe levels prior to entry for repair, maintenance, or emergency.

(10) Operation and Maintenance.

(a) An ambient ozone monitor should activate an alarm when the ozone level exceeds 0.1 ppm. Because the natural ozone levels can exceed 0.1 ppm under certain atmospheric conditions, it is permissible to set the alarm level at a slightly higher level to avoid nuisance alarms. Ozone generator shutdown shall occur when ambient levels exceed 0.3 ppm in the vicinity of an ozone generator or a contactor. Operators of the water treatment system may set the alarm level and the shutdown level lower at their discretion. It is required that an ozone ambient monitor activates a local audible alarm and/or flashing light warning, in addition to an alarm at the operator control system panel.

(b) There shall be an alarm/shutdown to prevent the dew point of the feed gas exceeding the maximum of -76 degrees F (-60 degrees C).

(c) Alarms and shutdowns shall be programmed based on the pressure gauges, temperature gauges, flow meters, and power meters, to protect the feed gas system, ozone generators, power supply units, and cooling water system.

R309-520-10. Chlorine Dioxide.

The public water systems must take into consideration that chlorine dioxide and its byproducts may have similar effects as chloramines and the impact on sensitive population. Chlorine dioxide should not be intentionally used as a secondary disinfectant. The water system must monitor the chlorine dioxide residuals and byproducts in the distribution system. If chlorine dioxide residual enters the distribution system and may result in impact on sensitive population, the public water system shall notify the public of the change and/or the schedule for the change, particularly notification to sensitive populations such as hospitals and kidney dialysis facilities serving dialysis patients and fisheries.

(1) Pre-design Proposal.

Proposals for the use of chlorine dioxide shall be discussed with the Division prior to the preparation of final plans and specifications. A water system must submit a detailed written proposal to the Director for review, including:

(a) The make, model, and specifications for proposed

chlorine dioxide generator

(b) References of other U.S. potable water installations of the proposed unit

(c) Information on the operational and maintenance training program

(d) The expected total applied dosage of chlorine dioxide and other disinfectants as well as the points of application for all disinfectants and the type and amount of residuals and by-products expected in the distribution system

(2) Chlorine dioxide generators

(a) Chlorine dioxide generation should be designed to be efficient compared to industry standard, and production of excess chlorine shall be minimized.

(b) The generator shall not produce a solution with chlorine dioxide concentration more than 6,000 mg/L to minimize the explosion hazard.

(c) The design shall include capability to measure concentrations of chlorine dioxide, chlorite, chlorate, and free chlorine of the solution leaving the generator.

(d) The chlorine dioxide generator shall be equipped with a chlorine dioxide analyzer to measure the strength of the solution leaving the generator.

(e) Generators which use solid chlorite will not be allowed.

(3) Chlorine Dioxide Feed and Storage System

(a) Chlorine Dioxide Feed system.

(i) Use fiberglass reinforced vinyl ester plastic (FRP) or high density linear polyethylene (HDLPE) tanks with no insulation.

(ii) If centrifugal pumps are used, provide Teflon packing material. Pump motors must be totally enclosed, fan-cooled, equipped with permanently sealed bearings, and equipped with double mechanical seals or other means to prevent leakage.

(iii) Provide chlorinated PVC, vinyl ester or Teflon piping material. Do not use carbon steel or stainless steel piping systems.

(iv) Provide glass view ports for the reactor if it is not made of transparent material.

(v) Provide flow monitoring on all chemical feed lines, dilution water lines, and chlorine dioxide solution lines.

(vi) Provide a means to verify calibrated feed flow to each application feed point.

(vii) Control air contact with chlorine dioxide solution to limit potential for explosive concentrations building up within the feed facility.

(viii) All chlorite solutions shall have concentrations less than 30%. Higher strength solutions are susceptible to crystallization and stratification.

(b) Chlorine Dioxide Storage and Operating Area. The following requirements apply to the chlorite storage and chlorine dioxide day tank area.

(i) The chlorine dioxide facility shall be physically located in a separate room from other water treatment plant operating areas.

(ii) The chlorine dioxide area shall have a ventilation system separate from other operating areas.

(iii) Provision shall be made to ventilate the chlorine dioxide facility area and maintain the ambient air chlorine dioxide concentrations below the Permissible Exposure Limit (PEL).

(A) The ventilating fan(s) take suction near the floor, as far as practical from the door and air inlet, with the point of discharge so located as not to contaminate air inlets of any rooms or structures.

(B) Air inlets are provided near the ceiling.

(C) Air inlets and outlets shall be louvered.

(D) Separate switches for the fans are outside and near the entrance of the facility.

- (iv) The area housing chlorine dioxide facility shall be constructed of non-combustible materials such as concrete.
 - (v) There shall be an ambient air chlorine dioxide sensor in the vicinity of the chlorine dioxide operating area. The ambient air chlorine dioxide readouts and alarm or warning light shall be audible and visible in the operating area and on the outside of the door to the operating area. The design shall include distinguishing audible alarms that are triggered by the ambient air chlorine dioxide sensor readings.
 - (vi) There shall be observation windows through which the operating area can be observed from outside the room to ensure operator safety.
 - (vii) Manual switches to the light in the operating area shall be located outside the door to the room.
 - (viii) There shall be an emergency shower and eyewash outside and close to the door to the operating area.
 - (ix) An emergency shutoff control to shut flows to the generator shall be located outside the operating area.
 - (x) The design shall minimize the possibility of chlorite leaks.
 - (xi) The chlorite tank and chlorine dioxide solution tank shall be vented to the outdoors away from any operating areas.
 - (xii) Gaseous chlorine feed to the chlorine dioxide generator shall enter the chlorine dioxide facility area through lines which can only feed to vacuum.
 - (xiii) The floor of the chlorine dioxide facility area shall slope to a sump.
 - (xiv) There shall not be any open drains in the chlorine dioxide operating area.
 - (xv) Provide secondary containments with sumps for chlorine dioxide storage, and chlorine dioxide solutions which can hold the entire volume of these vessels. This containment shall prevent these solutions from entering the rest of the operating area.
 - (xvi) Provide wash-down water within the operating area.
 - (xvii) The operating area shall be designed to avoid direct exposure to sunlight, UV light, or excessive heat.
- (4) Other Design Criteria.
- (a) Provide secondary containment, a sump, wash-down water, and a shower and eyewash at the bulk delivery transfer point.
 - (b) Finished water shall be used for chlorine dioxide generation.
 - (c) The finished water line to the chlorine dioxide generator shall be protected with a high hazard assembly.
 - (d) Provide a water supply near the storage and handling area for cleanup.
 - (e) The parts of the chlorine dioxide system in contact with the strong oxidizing or acid solutions shall be of inert material.
 - (f) The design shall provide the capability to shut off the chlorine dioxide operation remotely, i.e., from a location that is outside of the chlorine dioxide operating area.
- (5) Operation and Maintenance.
- (a) Do not store or handle combustible or reactive materials, such as acids, reduced metals, or organic material, in the chlorine dioxide operating area.
 - (b) Store chemicals in clean, closed, non-translucent containers.
 - (c) Personal protective equipment and first aid kits shall be stored at a nearby location that is outside the chlorine dioxide facility area.
 - (d) The temperature of the chlorine dioxide operating area shall be maintained between 60 and 100 degrees F.
 - (e) After delivery allow chlorite solutions to equalize with the ambient temperature of the operating area to avoid stratification.

- (f) The Operating and Maintenance manual shall include operator safety and emergency response procedures. Personnel shall have ongoing training for operator safety and emergency response procedures.
- (g) All wastes should be disposed of in accordance to any existing solid and hazardous waste regulations.
- (h) The operating area should be inspected daily for chlorite spills and solid chlorite buildup. The daily inspections shall be logged.
- (i) Chlorite leaks and solid chlorite buildup should be cleaned up and disposed of immediately.
- (j) Solid chlorite should be washed down before removal.
- (k) The ventilation system in the chlorine dioxide facility area shall be operated to maintain the ambient air chlorine dioxide concentrations below the Permissible Exposure Limit (PEL).
- (l) Audible alarms shall be programmed to alert water treatment plant personnel when the ambient air chlorine dioxide sensor in the vicinity of the chlorine dioxide operating area detects the chlorine dioxide concentration above the Permissible Exposure Limit (PEL) and the Short Term Exposure Limit (STEL).

R309-520-11. Chloramines.

Proposals for the use of Chloramines as a disinfectant shall be discussed with the Division prior to the preparation of final plans and specifications.

KEY: drinking water, primary disinfectants, secondary disinfectants, operation and maintenance**August 28, 2013****19-4-104****Notice of Continuation March 13, 2015**

R309. Environmental Quality, Drinking Water.
R309-525. Facility Design and Operation: Conventional Surface Water Treatment.
R309-525-1. Purpose.

This rule specifies requirements for conventional surface water treatment plants used in public water systems. It is intended to be applied in conjunction with rules R309-500 through R309-550. Collectively, these rules govern the design, construction, operation and maintenance of public drinking water system facilities. These rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water which consistently meet applicable drinking water quality requirements and do not pose a threat to general public health.

R309-525-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-525-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-525-4. General.

(1) Treatment plants used for the purification of surface water supplies or ground water supplies under direct influence of surface water must conform to the requirements given herein. The plants shall have, as a minimum, facilities for flash mixing of coagulant chemicals, flocculation, sedimentation, filtration and disinfection.

(2) The overall design of a water treatment facility must be carefully examined to assure the compatibility of all devices and processes. The design of treatment processes and devices shall depend on an evaluation of the nature and quality of the particular water to be treated. The combined unit processes shall produce water meeting all established drinking water standards as given in R309-200.

(3) Direct filtration may be acceptable and rules governing this method are given in R309-530-5.

(4) Refer to R309-530-9 for policy with regards to novel water treatment equipment or techniques which may depart from the requirements outlined herein.

R309-525-5. Plant Capacity and Number of Treatment Trains.

(1) A determination of the required plant capacity and the required number of treatment trains shall be made by the Director after consultation with the Division. Ordinarily, a minimum of two units each for flocculation, sedimentation and filtration must be provided. The design shall provide for parallel or series operation of the clarification stages. Flash mix shall be designed and operated to provide a minimum velocity gradient of 750 fps/ft. Mixing time shall be less than thirty seconds. The treatment plant shall be designed to meet the anticipated "peak day demand" of the system being served when the treatment plant is the system's sole source. When other sources are available to the system, this requirement may be relaxed.

(2) The degree of "back-up" required in a water treatment plant will vary with the number of connections to be served, the availability of other acceptable sources of water, and the ability to control water consumption. Thus, when other sources are available to the system, the requirements of R309-525-7 (Plant Reliability) may also be relaxed. The Division shall be consulted in this regard prior to plant design.

R309-525-6. Plant Siting.

Plants must be sited with due regard for earthquake, flood, and fire hazard. Assistance in this matter is available from the Utah Geologic Survey. The Division shall be consulted regarding site selection prior to the preparation of engineering plans and specifications.

R309-525-7. Plant Reliability.

Plants designed for processing surface water or ground water under direct influence of surface water shall be designed to meet present and future water demands and assure reliable operation at all times. To help assure proper, uninterrupted operation:

(1) A manual override shall be provided for any automatic controls. Highly sophisticated automation may put proper maintenance beyond the capability of the plant operator, leading to equipment breakdowns or expensive servicing. Adequate funding must be assured for maintenance of automatic equipment.

(2) Main switch electrical controls shall be located above grade, in areas not subject to flooding.

(3) Plants shall be operated by qualified personnel approved by the Director. As a minimum, the treatment plant manager is required to be certified in accordance with R309-300 at the grade of the waterworks system with an appropriate unrestricted Utah Operator's Certificate.

(4) The plant shall be constructed to permit units to be taken out of service without disrupting operation, and with drains or pumps sized to allow dewatering in a reasonable period of time.

(5) The plant shall have standby power available to permit operation of essential functions during power outages.

(6) The plant shall be provided with backup equipment or necessary spare parts for all critical items.

(7) Individual components critical to the operation of a treatment plant shall be provided with anchorage to secure the components from loss due to an earthquake event.

R309-525-8. Color Coding and Pipe Marking.

The piping in water treatment plants shall be color coded for identification. The following table contains color schemes recommended by the Division. Identification of the direction of flow and the contained liquid shall also be made on the pipe.

TABLE 525-1

Recommended Color Scheme for Piping

Water Lines		
Raw		Olive Green
Settled or Clarified		Aquamarine
Finished		Dark Blue
Chemical Lines		
Alum		Orange
Ammonia		White
Carbon Slurry		Black
Chlorine (Gas and Solution)		Yellow
Fluoride		Light Blue with Red Band
Lime Slurry		Light Green
Potassium Permanganate		Violet
Sulfur Dioxide		Light Green with Yellow Band
Waste lines		
Backwash Waste		Light Brown
Sludge		Dark Brown
Sewer (Sanitary or Other)		Dark Gray
Other		
Compressed Air		Dark Green
Gas		Red
Other Lines		Light Gray

R309-525-9. Diversion Structures and Pretreatment.

Refer to R309-515-5(5) for diversion structure design.

R309-525-10. Presedimentation.

Waters containing, heavy grit, sand, gravel, leaves, debris, or a large volume of sediments may require pretreatment, usually sedimentation, with or without the addition of coagulation chemicals.

(1) Presedimentation basins shall be equipped for efficient sludge removal.

(2) Incoming water shall be dispersed across the full width of the line of travel as efficiently as practical. Short-circuiting shall be minimized.

(3) Provisions for bypassing presedimentation basins shall be included.

R309-525-11. Chemical Addition.

(1) Standards.

Chemicals used in the treatment of surface water shall achieve the following:

(a) Primary coagulant chemicals shall be utilized to permit the formation of a floc,

(b) Disinfectants shall be added to raw and/or treated water.

(2) Application Criteria.

In achieving these goals the chemical(s) shall be applied to the water:

(a) To assure maximum control and flexibility of treatment,

(b) To assure maximum safety to consumer and operators,

(c) To prevent backflow or back-siphonage of chemical solutions to finished water systems.

(d) With appropriate spacing of chemical feed to eliminate any interference between chemicals.

(3) Typical Chemical Doses.

Chemical doses shall be estimated for each treatment plant to be designed. "Jar tests" shall be conducted on representative raw water samples to determine anticipated doses.

(4) Information Required for Review.

With respect to chemical applications, a submittal for Division review and Director approval shall include:

(a) Descriptions of feed equipment, including maximum and minimum feed rates,

(b) Location of feeders, piping layout and points of application,

(c) Chemical storage and handling facilities,

(d) Specifications for chemicals to be used,

(e) Operating and control procedures including proposed application rates,

(f) Descriptions of testing equipment and procedures, and

(g) Results of chemical, physical, biological and other tests performed as necessary to define the optimum chemical treatment.

(5) Quality of Chemicals.

All chemicals added to water being treated for use in a public water system for human consumption shall comply with ANSI/NSF Standard 60. Evidence for this requirement shall be met if the chemical shipping container labels or material safety data sheets include:

(a) Chemical name, purity and concentrations, Supplier name and address, and

(b) Labeling indicating compliance with ANSI/NSF Standard 60.

(6) Storage, Safe Handling and Ventilation of Chemicals.

All requirements of the Utah Occupational Safety and Health Act (UOSHA) for storage, safe handling and ventilation of chemicals shall apply to public drinking water facilities. The designer shall incorporate all applicable

UOSHA standards into the facility design, however, review of facility plans by the Director under this Rule shall be limited to the following requirements:

(a) Storage of Chemicals.

(i) Space shall be provided for:

(A) An adequate supply of chemicals,

(B) Convenient and efficient handling of chemicals,

(C) Dry storage conditions.

(ii) Storage tanks and pipelines for liquid chemicals

shall be specific to the chemicals and not for alternates.

(iii) Chemicals shall be stored in covered or unopened shipping containers, unless the chemical is transferred into a covered storage unit.

(iv) Liquid chemical storage tanks must:

(A) Have a liquid level indicator, and

(B) Have an overflow and a receiving basin or drain capable of receiving accidental spills or overflows, and meeting all requirements of R309-525-23, and

(C) Be equipped with an inverted "J" air vent.

(v) Acids shall be kept in closed acid-resistant shipping containers or storage units.

(b) Safe Handling.

(i) Material Safety Data Sheets for all chemicals utilized shall be kept and maintained in prominent display and be easily accessed by operators.

(ii) Provisions shall be made for disposing of empty bags, drums or barrels by an acceptable procedure which will minimize operator exposure to dusts.

(iii) Provisions shall be made for measuring quantities of chemicals used to prepare feed solutions.

(c) Dust Control and Ventilation.

Adequate provision shall be made for dust control and ventilation.

(7) Feeder Design, Location and Control.

(a) General Feeder Design.

General equipment design, location and control shall be such that:

(i) feeders shall supply, at all times, the necessary amounts of chemicals at an accurately controlled rate, throughout the anticipated range of feed,

(ii) chemical-contact materials and surfaces are resistant to the aggressiveness of the chemicals,

(iii) corrosive chemicals are introduced in a manner to minimize potential for corrosion,

(iv) chemicals that are incompatible are not fed, stored or handled together.

(v) all chemicals are conducted from the feeder to the point of application in separate conduits,

(vi) spare parts are available for all feeders to replace parts which are subject to wear and damage,

(vii) chemical feeders are as near as practical to the feed point,

(viii) chemical feeders and pumps operate at no lower than 20 percent of the feed range,

(ix) chemicals are fed by gravity where practical,

(x) be readily accessible for servicing, repair, and observation.

(b) Chemical Feed Equipment.

Where chemical feed is necessary for the protection of the consumer, such as disinfection, coagulation or other essential processes:

(i) a minimum of two feeders, one active and one standby, shall be provided for each chemical,

(ii) the standby unit or a combination of units of sufficient capacity shall be available to replace the largest unit during shut-downs,

(iii) where a booster pump is required, duplicate equipment shall be provided and, when necessary, standby power,

(iv) a separate feeder shall be used for each non-compatible chemical applied where a feed pump is required, and

(v) spare parts shall be available for all feeders to replace parts which are subject to wear and damage.

(c) Dry Chemical Feeders.

Dry chemical feeders shall:

(i) measure feed rate of chemicals volumetrically or gravimetrically, and

(ii) provide adequate solution water and agitation of the chemical in the solution tank.

(d) Feed Rate Control.

(i) Feeders may be manually or automatically controlled, with automatic controls being designed to allow override by manual controls.

(ii) Chemical feed rates shall be proportional to flows.

(iii) A means to measure water flow rate shall be provided.

(iv) Provisions shall be made for measuring the quantities of chemicals used.

(v) Weighing scales:

(A) shall be provided for weighing cylinders at all plants using chlorine gas,

(B) may be required for fluoride solution feed, where applicable,

(C) shall be provided for volumetric dry chemical feeders, and

(D) shall be accurate to measure increments of 0.5 percent of scale capacity.

(8) Feeder Appurtenances.

(a) Liquid Chemical Solution Pumps.

Positive displacement type solution feed pumps shall be used to feed liquid chemicals, but shall not be used to feed chemical slurries. Pumps must be sized to match or exceed maximum head conditions found at the point of injection. All liquid chemical feeders shall be provided with devices approved by the Utah Plumbing Code which will prevent the siphoning of liquid chemical through the pump.

(b) Solution Tanks.

(i) A means consistent with the nature of the chemical solution shall be provided in a solution tank to maintain a uniform strength of solution. Continuous agitation shall be provided to maintain slurries in suspension.

(ii) Means shall be provided to measure the solution level in the tank.

(iii) Chemical solutions shall be kept covered. Large tanks with access openings shall have the openings curbed and fitted with tight overhanging covers.

(iv) Subsurface locations are discouraged, but when used for solution tanks shall:

(A) be free from sources of possible contamination, and

(B) assure positive drainage for ground waters, accumulated water, chemical spills and overflows.

(v) Overflow pipes, when provided, shall:

(A) have a free fall discharge, and

(B) be located where noticeable.

(vi) Acid storage tanks shall be vented to the outside atmosphere, but not through vents in common with day tanks.

(vii) Each tank shall be provided with a valved drain, protected against backflow in accordance with R309-525-11(10)(b) and R309-525-11(10)(c).

(viii) Solution tanks shall be located and protective curbing provided so that chemicals from equipment failure, spillage or accidental drainage shall not enter the water in conduits, treatment or storage basins.

(ix) When polymers are used, storage tanks shall be located away from heat sources and direct sunlight.

(c) Day Tanks.

(i) Day tanks shall be provided where dilution of liquid

chemical is required prior to feeding.

(ii) Day tanks shall meet all the requirements of R309-525-11(9)(b).

(iii) Certain chemicals, such as polymers, become unstable after hydration, therefore, day tanks shall hold no more than a thirty hour supply unless manufacturer's recommendations allow for longer periods.

(iv) Day tanks shall be scale-mounted, or have a calibrated gauge painted or mounted on the side if liquid levels cannot be observed in a gauge tube or through translucent sidewalls of the tank. In opaque tanks, a gauge rod extending above a referenced point at the top of the tank, attached to a float may be used. The ratio of the cross-sectional area of the tank to its height must be such that unit readings are meaningful in relation to the total amount of chemical fed during a day.

(v) Hand pumps may be provided for transfer from a carboy or drum. A top rack may be used to permit withdrawal into a bucket from a spigot. Where motor-driven transfer pumps are provided a liquid level limit switch and an overflow from the day tank, which will drain by gravity back into the bulk storage tank, must be provided, unless spill containment is provided for both bulk and day tanks.

(vi) A means which is consistent with the nature of the chemical solution shall be provided to maintain uniform strength of solution in a day tank. Continuous agitation shall be provided to maintain chemical slurries in suspension.

(vii) Tanks shall be properly labeled to designate the chemical contained.

(d) Feed Lines.

(i) Feed lines shall be as short as possible in length of run, and be:

(A) of durable, corrosion resistant material,

(B) easily accessible throughout the entire length,

(C) protected against freezing, and

(D) readily cleanable.

(ii) Feed lines shall slope upward from the chemical source to the feeder when conveying gases.

(iii) Lines shall be designed with due consideration of scale forming or solids depositing properties of the water, chemical, solution or mixture conveyed.

(9) Make up Water Supply and Protection.

(a) In Plant Water Supply.

In plant water supply shall be:

(i) Ample in supply, adequate in pressure, and of a quality equal to or better than the water at the point of application.

(ii) Provided with means for measurement when preparing specific solution concentrations by dilution.

(iii) Properly protected against backflow.

(b) Cross-Connection Control.

Cross-connection control shall be provided to assure that:

(i) The make-up waterlines discharging to solution tanks shall be properly protected from backflow as required by the Utah Plumbing Code.

(ii) Liquid chemical solutions cannot be siphoned through solution feeders into the process units as required in R309-525-11(9)(c).

(iii) No direct connection exists between any sewer and the drain or overflow from the feeder, solution chamber or tank by providing that all pipes terminate at least six inches or two pipe diameters, whichever is greater, above the overflow rim of a receiving sump, conduit or waste receptacle.

(iv) Pre- and post-chlorination systems must be independent to prevent possible siphoning of partially treated water into the clear well. The water supply to each eductor shall have a separate shut-off valve. No master shut off valve will be allowed.

- (c) Liquid Chemical Feeders, Siphon Control. Liquid chemical feeders shall be such that chemical solutions cannot be siphoned into the process units, by:
 - (i) Assuring positive pressure at the point of discharge,
 - (ii) Providing vacuum relief,
 - (iii) Providing a suitable air gap, or
 - (iv) Other suitable means or combinations as necessary.
- (10) Operator Safety.

Design of the plant shall be in accordance with the Utah Occupational Safety and Health Act (UOSHA). The designer and public water system management are responsible to see that they incorporate applicable UOSHA standards into the facility design and operation. Review of facility plans by the Division shall be limited to the following requirements:

- (a) Floor surfaces shall be smooth and impervious, slip-proof and well drained,
- (b) At least one pair of rubber gloves, a dust respirator of a type certified by the National Institute of Occupational Safety and Health (NIOSH) for toxic dusts, an apron or other protective clothing and goggles or face mask should be provided for each operator, A deluge shower and/or eye washing device shall be installed where strong acids and alkalis are used or stored.

(c) A water holding tank that will allow water to reach room temperature should be installed in the water line feeding the deluge shower and eye washing device. Other methods of water tempering may be available.

- (d) Adequate ventilation should be provided.

(11) Design for Specific Chemicals.

Design of the plant shall be in accordance with the Utah Occupational Safety and Health Act (UOSHA). The designer and public water system management are responsible to see that they incorporate applicable UOSHA standards into the facility design and operation. Review of facility plans by the Division shall be limited to the following requirements:

Acids and Caustics.

- (i) Acids and caustics shall be kept in closed corrosion-resistant shipping containers or storage units.
- (ii) Acids and caustics shall not be handled in open vessels, but shall be pumped in undiluted form from original containers through suitable hose, to the point of treatment or to a covered day tank.

Sodium Chlorite for Chlorine Dioxide Generation.

Proposals for the storage and use of sodium chlorite should be approved by the Director prior to the preparation of final plans and specifications. Provisions shall be made for proper storage and handling of sodium chlorite to eliminate any danger of explosion.

(i) Sodium Chlorite Storage: (A) Sodium chlorite shall be stored by itself in a separate room and preferably should be stored in an outside building detached from the water treatment facility. It shall be stored away from organic materials which would react violently with sodium chlorite; (B) The storage structures shall be constructed of noncombustible materials; (C) If the storage structure is to be located in a area where a fire may occur, water shall be available to keep the sodium chlorite area sufficiently cool to prevent decomposition from heat and resultant potential explosive conditions.

(ii) Sodium Chlorite Handling: (A) Care should be taken to prevent spillage; (B) An emergency plan of operation shall be available for the clean up of any spillage; (C) Storage drums should be thoroughly flushed prior to recycling or disposal.

(iii) Sodium Chlorite Feeders: (A) Positive displacement feeders should be provided; (B) Tubing for conveying sodium chlorite or chlorine dioxide solutions shall be Type 1 PVC, polyethylene or materials recommended by the manufacturer; (C) Feed lines shall be installed in a manner to prevent

formation of gas pockets and shall terminate at a point of positive pressure; (D) Check valves shall be provided to prevent the backflow of chlorine into the sodium chlorite line.

R309-525-12. Mixing.

- (1) Flash Mix.
 - (a) Equipment - Mechanical, in-line or jet mixing devices shall be used.
 - (b) Mixing - All devices used in rapid mixing shall be capable of imparting a minimum velocity gradient (G) of at least 750 fps per foot. Mixing time shall be less than thirty seconds.
 - (c) Location - The flash mix and flocculation basins shall be as close together as possible.
 - (d) Introduction of chemicals - Primary coagulant chemicals shall be added at the point of maximum turbulence within the flash mix unit. Where in-line mixing devices are used chemical injection shall be at the most appropriate upstream point.

(2) Flocculation.

(a) Basin design.

Inlet and outlet design shall prevent short-circuiting and destruction of floc. A drain or pumps shall be provided to handle dewatering and sludge removal.

(b) Detention.

The flow-through velocity shall not be less than 0.5 feet per minute nor greater than 1.5 feet per minute with a detention time for floc formation of at least 30 minutes.

(c) Equipment.

Agitators shall be driven by variable speed drives with the peripheral speed of paddles ranging from 0.5 fps to 2.0 fps. Equipment shall be capable of imparting a velocity gradient (G) between 25 fps per foot and 80 fps per foot to the water treated. Compartmentalized tapered energy flocculation concept may also be used in which G tapers from 100 fps to 10 fps per foot.

(d) Hydraulic flocculation.

Hydraulic flocculation may be permitted and shall be reviewed on a case by case basis. The unit must yield a G value equivalent to that required by b and c above.

(e) Piping.

Flocculation and sedimentation basins shall be as close as possible. The velocity of flocculated water through pipes or conduits to settling basins shall not be less than 0.5 fps nor greater than 1.5 fps. Allowance must be made to minimize turbulence at bends and changes in direction.

(f) Other designs.

Baffling may be used to provide for flocculation in small plants only after approval by the Director. The design shall be such that the velocities and flows noted above will be maintained.

(g) Visible floc.

The flocculation unit shall be capable of producing a visible, settleable floc.

R309-525-13. Sedimentation.

(1) General Design Requirements.

Sedimentation shall follow flocculation. The detention time for effective clarification is dependent upon a number of factors related to basin design and the nature of the raw water. The following criteria apply to conventional sedimentation units:

(a) Inlet devices.

Inlets shall be designed to distribute the water equally and at uniform velocities. Open ports, submerged ports, or similar entrance arrangements are required. A baffle shall be constructed across the basin close to the inlet end and shall project several feet below the water surface to dissipate inlet velocities and provide uniform flows across the basin.

(b) Outlet devices.

Outlet devices shall be designed to maintain velocities suitable for settling in the basin and to minimize short-circuiting. The use of submerged orifices is recommended in order to provide a volume above the orifices for storage when there are fluctuations in the flow.

(c) Emergency Overflow.

An overflow weir (or pipe) shall be installed which will establish the maximum water level desired on top of the filters. It shall discharge by gravity with a free fall to a location where the discharge will be visible.

(d) Sludge Removal.

Sludge removal design shall provide that:

- (i) sludge pipes shall be not less than three inches in diameter and arranged to facilitate cleaning,
 - (ii) entrance to sludge withdrawal piping shall prevent clogging,
 - (iii) valves shall be located outside the basin for accessibility, and
 - (iv) the operator may observe and sample sludge being withdrawn from the unit.
- (v) Sludge collection shall be accomplished by mechanical means.

(e) Drainage.

Basins shall be provided with a means for dewatering. Basin bottoms shall slope toward the drain not less than one foot in 12 feet where mechanical sludge collection equipment is not provided.

(f) Flushing lines.

Flushing lines or hydrants shall be provided and shall be equipped with backflow prevention devices acceptable to the Director.

(g) Safety.

Appropriate safety devices shall be included as required by the Occupational Safety and Health Act (OSHA).

(h) Removal of floating material.

Provision shall be made for the periodic removal of floating material.

(2) Sedimentation Without Tube Settlers.

If tube settling equipment is not used within settling basins, the following requirements apply:

(a) Detention Time.

A minimum of four hours of detention time shall be provided. Reduced sedimentation time may be approved when equivalent effective settling is demonstrated or multimedia filtration is employed.

(b) Weir Loading.

The rate of flow over the outlet weir shall not exceed 20,000 gallons per day per foot of weir length. Where submerged orifices are used as an alternate for overflow weirs they shall not be lower than three feet below the water surface when the flow rates are equivalent to weir loading.

(c) Velocity.

The velocity through settling basins shall not exceed 0.5 feet per minute. The basins shall be designed to minimize short-circuiting. Fixed or adjustable baffles shall be provided as necessary to achieve the maximum potential for clarification.

(d) Depth.

The depth of the sedimentation basin shall be designed for optimum removal.

(3) Sedimentation With Tube Settlers.

Proposals for settler unit clarification shall be approved by the Director prior to the preparation of final plans and specifications.

(a) Inlet and outlet design shall be such to maintain velocities suitable for settling in the basin and to minimize short circuiting.

(b) Flushing lines shall be provided to facilitate

maintenance and be properly protected against backflow or back siphonage. Drain and sludge piping from the settler units shall be sized to facilitate a quick flush of the settler units and to prevent flooding other portions of the plant.

(c) Although most units will be located within a plant, design of outdoor installations shall provide sufficient freeboard above the top of settlers to prevent freezing in the units.

(d) The design application rate shall be a maximum rate of 2 gal/sq.ft./min of cross-sectional area (based on 24-inch long 60 degree tubes or 39.5-inch long 7.5 degree tubes), unless higher rates are successfully shown through pilot plant or in-plant demonstration studies.

R309-525-14. Solids Contact Units.

(1) General.

Solids contact units are generally acceptable for combined softening and clarification where water characteristics, especially temperature, do not fluctuate rapidly, flow rates are uniform and operation is continuous. Before such units are considered as clarifiers without softening, specific approval of the Director shall be obtained. A minimum of two units are required for surface water treatment.

(2) Installation of Equipment

The design engineer shall see that a representative of the manufacturer is present at the time of initial start-up operation to assure that the units are operating properly.

(3) Operation of Equipment.

The following shall be provided for plant operation:

- (a) a complete outfit of tools and accessories,
- (b) necessary laboratory equipment, and
- (c) adequate piping with suitable sampling taps so located as to permit the collection of samples of water from critical portions of the units.

(4) Chemical feed.

Chemicals shall be applied at such points and by such means as to insure satisfactory mixing of the chemicals with the water.

(5) Mixing.

A flash mix device or chamber ahead of solids contact units may be required to assure proper mixing of the chemicals applied. Mixing devices employed shall be so constructed as to:

- (a) provide good mixing of the raw water with previously formed sludge particles, and
- (b) prevent deposition of solids in the mixing zone.

(6) Flocculation.

Flocculation equipment:

- (a) shall be adjustable (speed and/or pitch),
- (b) shall provide for coagulation in a separate chamber or baffled zone within the unit, and
- (c) shall provide the flocculation and mixing period to be not less than 30 minutes.

(7) Sludge concentrators.

(a) The equipment shall provide either internal or external concentrators in order to obtain a concentrated sludge with a minimum of waste water.

(b) Large basins shall have at least two sumps for collecting sludge with one sump located in the central flocculation zone.

(8) Sludge removal.

Sludge removal design shall provide that:

- (a) sludge pipes shall be not less than three inches in diameter and so arranged as to facilitate cleaning,
- (b) the entrance to the sludge withdrawal piping shall prevent clogging,
- (c) valves shall be located outside the tank for accessibility, and

(d) the operator may observe and sample sludge being withdrawn from the unit.

(9) Cross-connections.

(a) Blow-off outlets and drains shall terminate and discharge at places satisfactory to the Director.

(b) Cross-connection control must be included for the finished drinking water lines used to back flush the sludge lines.

(10) Detention period.

The detention time shall be established on the basis of the raw water characteristics and other local conditions that affect the operation of the unit. Based on design flow rates, the detention time shall be:

(a) two to four hours for suspended solids contact clarifiers and softeners treating surface water, and

(b) one to two hours for suspended solids contact softeners treating only ground water.

(11) Suspended slurry concentrate.

Softening units shall be designed so that continuous slurry concentrates of one percent or more, by weight, can be satisfactorily maintained.

(12) Water losses.

(a) Units shall be provided with suitable controls for sludge withdrawal.

(b) Total water losses shall not exceed:

(i) five percent for clarifiers,

(ii) three percent for softening units.

(c) Solids concentration of sludge bled to waste shall be:

(i) three percent by weight for clarifiers,

(ii) five percent by weight for softeners.

(13) Weirs or orifices.

The units shall be equipped with either overflow weirs or orifices constructed so that water at the surface of the unit does not travel over 10 feet horizontally to the collection trough.

(a) Weirs shall be adjustable, and at least equivalent in length to the perimeter of the basin.

(b) Weir loading shall not exceed:

(i) 10 gpm per foot of weir length for units used for clarifiers

(ii) 20 gpm per foot of weir length for units used for softeners.

(c) Where orifices are used the loading rates per foot of launderer shall be equivalent to weir loadings. Either shall produce uniform rising rates over the entire area of the tank.

(14) Upflow rates.

Upflow rates shall not exceed:

(a) 1.0 gpm/sf at the sludge separation line for units used for clarifiers,

(b) 1.75 gpm/sf at the slurry separation line for units used as softeners.

R309-525-15. Filtration.

(1) General.

Filters may be composed of one or more media layers. Mono-media filters are relatively uniform throughout their depth. Dual or multi-layer beds of filter material are so designed that water being filtered first encounters coarse material, and progressively finer material as it travels through the bed.

(2) Rate of Filtration.

(a) The rate of filtration shall be determined through consideration of such factors as raw water quality, degree of pretreatment provided, filter media, water quality control parameters, competency of operating personnel, and other factors as determined by the Director. Generally, higher filter rates can be assigned for the dual or multi-media filter than for a single media filter because the former is more resistant to filter breakthrough.

(b) The filter rate shall be proposed and justified by the designing engineer to the satisfaction of the Director prior to the preparation of final plans and specifications.

(c) The use of dual or multi-media filters may allow a reduction of sedimentation detention time (see R309-525-13(2)(a)) due to their increased ability to store sludge.

(d) Filter rates assigned by the Director must never be exceeded, even during backwash periods.

(e) The use of filter types other than conventional rapid sand gravity filters must receive written approval from the Director prior to the preparation of final plans and specifications.

(3) Number of Filters Required.

At least two filter units shall be provided. Where only two filter units are provided, each shall be capable of meeting the plant design capacity (normally the projected peak day demand) at the approved filtration rate. Where more than two filter units are provided, filters shall be capable of meeting the plant design capacity at the approved filtration rate with one filter removed from service. Refer to R309-525-5 for situations where these requirements may be relaxed.

(4) Media Design.

R309-525-15(4)(a) through R309-525-15(4)(e), which follow, give requirements for filter media design. These requirements are considered minimum and may be made more stringent if deemed appropriate by the Director.

(a) Mono-media, Rapid Rate Gravity Filters.

The allowable maximum filtration rate for a silica sand, mono-media filter is three gpm/sf. This type of filter is composed of clean silica sand having an effective size of 0.35 mm to 0.65 mm and having a uniformity coefficient less than 1.7. The total bed thickness must not be less than 24 inches nor generally more than 30 inches.

(b) Dual Media, Rapid Rate Gravity Filters.

The following applies to all dual media filters:

(i) Total depth of filter bed shall not be less than 24 inches nor generally more than 30 inches.

(ii) All materials used to make up the filter bed shall be of such particle size and density that they will be effectively washed at backwash rates between 15 and 20 gpm/sf. They must settle to reconstitute the bed essentially in the original layers upon completion of backwashing.

(iii) The bottom layer must be at least ten inches thick and consist of a material having an effective size no greater than 0.45 mm and a uniformity coefficient not greater than 1.5.

(iv) The top layer shall consist of clean crushed anthracite coal having an effective size of 0.45 mm to 1.2 mm, and a uniformity coefficient not greater than 1.5.

(v) Dual media filters will be assigned a filter rate up to six gpm/sf. Generally if the bottom fine layer consists of a material having an effective size of 0.35 mm or less, a filtration rate of six gpm/sf can be assigned.

(vi) Each dual media filter must be provided with equipment which shall continuously monitor turbidity in the filtered water. The equipment shall be so designed to initiate automatic backwash if the filter effluent turbidity exceeds 0.3 NTU. If the filter turbidity exceeds one NTU, filter shutdown is required. In plants attended part-time, this shutdown must be accomplished automatically and shall be accompanied by an alarm. In plants having full-time operators, a one NTU condition need only activate an alarm. Filter shutdown may then be accomplished by the operator.

(c) Tri-Media, Rapid Rate Gravity Filters.

The following applies to all Tri-media filters:

(i) Total depth of filter bed shall not be less than 24 inches nor generally more than 30 inches.

(ii) All materials used to make up the filter bed shall be of such particle size and density that they will be effectively

washed at backwash rates between 15 and 20 gpm/sf. They must settle to reconstitute the bed to the normal gradation of coarse to fine in the direction of flow upon completion of backwashing.

(iii) The bottom layer must be at least four inches thick and consist of a material having an effective size no greater than 0.45 mm and uniformity coefficient not greater than 2.2. The bottom layer thickness may be reduced to three inches if it consists of a material having an effective size no greater than 0.25 mm and a uniformity coefficient not greater than 2.2.

(iv) The middle layer must consist of silica sand having an effective size of 0.35 mm to 0.8 mm, and a uniformity coefficient not greater than 1.8.

(v) The top layer shall consist of clean crushed anthracite coal having an effective size of 0.45 mm to 1.2 mm, and a uniformity coefficient not greater than 1.85.

(vi) Tri-media filters will be assigned a filter rate up to 6 gpm/sf. Generally, if the bottom fine layer consists of a material having an effective size of 0.35 mm or less, a filtration rate of six gpm/sf can be assigned.

(vii) Each Tri-media filter must be provided with equipment which shall continuously monitor turbidity in the filtered water. The equipment shall be so designed to initiate automatic backwash if the effluent turbidity exceeds 0.3 NTU. If the filter turbidity exceeds one NTU, filter shutdown is required. In plants attended part-time, this shutdown must be accomplished automatically and shall be accompanied by an alarm. In plants having full-time operators, a one NTU condition need only activate an alarm. Filter shutdown may then be accomplished by the operator.

(d) Granulated Activated Carbon (GAC).

Use of granular activated carbon media shall receive the prior approval of the Director, and must meet the basic specifications for filter material as given above, and:

(i) There shall be provision for adding a disinfectant to achieve a suitable residual in the water following the filters and prior to distribution,

(ii) There shall be a means for periodic treatment of filter material for control of biological or other growths,

(iii) Facilities for carbon regeneration or replacement must be provided.

(e) Other Media Compositions and Configurations.

Filters consisting of materials or configurations not prescribed in this section will be considered on experimental data or available operation experience.

(5) Support Media, Filter Bottoms and Strainer Systems.

Care must be taken to insure that filter media, support media, filter bottoms and strainer systems are compatible and will give satisfactory service at all times.

(a) Support Media.

The design of support media will vary with the configuration of the filtering media and the filter bottom. Thus, support media and/or proprietary filter bottoms shall be reviewed on a case-by-case basis.

(b) Filter Bottoms and Strainer Systems.

(i) The design of manifold type collection systems shall:

(A) Minimize loss of head in the manifold and laterals,

(B) Assure even distribution of washwater and even rate of filtration over the entire area of the filter,

(C) Provide a ratio of the area of the final openings of the strainer system to the area of the filter of about 0.003,

(D) Provide the total cross-sectional area of the laterals at about twice the total area of the final openings,

(E) Provide the cross-sectional area of the manifold at 1.5 to 2 times the total area of the laterals.

(ii) Departures from these standards may be acceptable for high rate filter and for proprietary bottoms.

(iii) Porous plate bottoms shall not be used where

calcium carbonate, iron or manganese may clog them or with waters softened by lime.

(6) Structural Details and Hydraulics.

The filter structure shall be so designed as to provide for:

(a) Vertical walls within the filter,

(b) No protrusion of the filter walls into the filter media,

(c) Cover by superstructure,

(d) Head room to permit normal inspection and operation,

(e) Minimum water depth over the surface of the filter media of three feet, unless an exception is granted by the Director,

(f) Maximum water depth above the filter media shall not exceed 12 feet,

(g) Trapped effluent to prevent backflow of air to the bottom of the filters,

(h) Prevention of floor drainage to enter onto the filter by installation of a minimum four inch curb around the filters,

(i) Prevention of flooding by providing an overflow or other means of control,

(j) Maximum velocity of treated water in pipe and conduits to filters of two fps,

(k) Cleanouts and straight alignment for influent pipes or conduits where solids loading is heavy or following lime-soda softening,

(l) Washwater drain capacity to carry maximum flow,

(m) Walkways around filters, to be not less than 24 inches wide,

(n) Safety handrails or walls around filter areas adjacent to normal walkways,

(o) No common wall between filtered and unfiltered water shall exist. This requirement may be waived by the Director for small "package" type plants using metal tanks of sufficient thickness,

(p) Filtration to waste for each filter.

(7) Backwash.

(a) Water Backwash Without Air.

Water backwash systems shall be designed so that backwash water is not recycled to the head of the treatment plant unless it has been settled, as a minimum. Furthermore, water backwash systems; including tanks, pumps and pipelines, shall:

(i) Provide a minimum backwash rate of 15 gpm/sf, consistent with water temperatures and the specific gravity of the filter media. The design shall provide for adequate backwash with minimum media loss. A reduced rate of 10 gpm/sf may be acceptable for full depth anthracite or granular activated carbon filters.

(ii) provide finished drinking water at the required rate by washwater tanks, a washwater pump, from the high service main, or a combination of these.

(iii) Permit the backwashing of any one filter for not less than 15 minutes.

(iv) Be capable of backwashing at least two filters, consecutively.

(v) Include a means of varying filter backwash rate and time.

(vi) Include a washwater regulator or valve on the main washwater line to obtain the desired rate of filter wash with washwater valves or the individual filters open wide.

(vii) Include a rate of flow indicator, preferably with a totalizer on the main washwater line, located so that it can be easily read by the operator during the washing process.

(viii) Be designed to prevent rapid changes in backwash water flow.

(ix) Use only finished drinking water.

(x) Have washwater pumps in duplicate unless an alternate means of obtaining washwater is available.

(xi) Perform in conjunction with "filter to waste" system

to allow filter to stabilize before introduction into clearwell.

(b) Backwash with Air Scouring.

Air scouring can be considered in place of surface wash when:

- (i) air flow for air scouring the filter must be 3 to 5 scfm/sf of filter area when the air is introduced in the underdrain; a lower air rate must be used when the air scour distribution system is placed above the underdrains,
 - (ii) a method for avoiding excessive loss of the filter media during backwashing must be provided,
 - (iii) air scouring must be followed by a fluidization wash sufficient to restratify the media,
 - (iv) air must be free from contamination,
 - (v) air scour distribution systems shall be placed below the media and supporting bed interface; if placed at the interface the air scour nozzles shall be designed to prevent media from clogging the nozzles or entering the air distribution system.
 - (vi) piping for the air distribution system shall not be flexible hose which will collapse when not under air pressure and shall not be a relatively soft material which may erode at the orifice opening with the passage of air at high velocity.
 - (vii) air delivery piping shall not pass down through the filter media nor shall there be any arrangement in the filter design which would allow short circuiting between the applied unfiltered water and the filtered water,
 - (viii) consideration shall be given to maintenance and replacement of air delivery piping,
 - (ix) when air scour is provided the backwash water rate shall be variable and shall not exceed eight gpm/sf unless operating experience shows that a higher rate is necessary to remove scoured particles from filter surfaces.
 - (x) the filter underdrains shall be designed to accommodate air scour piping when the piping is installed in the underdrain, and
 - (xi) the provisions of Section R309-525-15(7)(a) (Backwash) shall be followed.
- (8) Surface Wash or Subsurface Wash.
- Surface wash or subsurface wash facilities are required except for filters used exclusively for iron or manganese removal. Washing may be accomplished by a system of fixed nozzles or a revolving-type apparatus, provided:
- (a) Provisions for water pressures of at least 45 psi,
 - (b) A properly installed vacuum breaker or other approved device to prevent back-siphonage if connected to a finished drinking water system,
 - (c) All washwater must be finished drinking water,
 - (d) Rate of flow of two gpm/sf of filter area with fixed nozzles or 0.5 gpm/sf with revolving arms.
- (9) Washwater Troughs.
- Washwater troughs shall be so designed to provide:
- (a) The bottom elevation above the maximum level of expanded media during washing,
 - (b) A two inch freeboard at the maximum rate of wash,
 - (c) The top edge level and all edges of trough at the same elevation
 - (d) Spacing so that each trough serves the same number of square feet of filter areas,
 - (e) Maximum horizontal travel of suspended particles to reach the trough not to exceed three feet.
- (10) Appurtenances.
- (a) The following shall be provided for every filter:
 - (i) Sample taps or means to obtain samples from influent and effluent,
 - (ii) A gauge indicating loss of head,
 - (iii) A meter indicating rate-of-flow. A modified rate controller which limits the rate of filtration to a maximum rate may be used. However, equipment that simply maintains a constant water level on the filters is not acceptable, unless the

rate of flow onto the filter is properly controlled,

(iv) A continuous turbidity monitoring device where the filter is to be loaded at a rate greater than three gpm/sf

(v) Provisions for draining the filter to waste with appropriate measures for backflow prevention (see R309-525-23).

(i) Wall sleeves providing access to the filter interior at several locations for sampling or pressure sensing,

(ii) A 1.0 inch to 1.5 inch diameter pressure hose and storage rack at the operating floor for washing filter walls.

(11) Miscellaneous.

Roof drains shall not discharge into filters or basins and conduits preceding the filters.

R309-525-16. In-Plant Finished Drinking Water Storage.

(1) General.

In addition to the following, the applicable design standards of R309-545 shall be followed for plant storage.

(a) Backwash Water Tanks.

Backwash water tanks shall be sized, in conjunction with available pump units and finished water storage, to provide the backwash water required by R309-525-15(7).

Consideration shall be given to the backwashing of several filters in rapid succession.

(b) Clearwell.

Clearwell storage shall be sized, in conjunction with distribution system storage, to relieve the filters from having to follow fluctuations in water use.

(i) When finished water storage is used to provide the contact time for chlorine (see R309-520-10(1)(f), especially sub-section (f)(iv)), special attention must be given to size and baffling.

(ii) To ensure adequate chlorine contact time, sizing of the clearwell shall include extra volume to accommodate depletion of storage during the nighttime for intermittently operated filtration plants with automatic high service pumping from the clearwell during non-treatment hours.

(iii) An overflow and vent shall be provided.

(2) Adjacent Compartments.

Finished drinking water shall not be stored or conveyed in a compartment adjacent to unsafe water when the two compartments are separated by a single wall. The Director may grant an exception to this requirement for small "package" treatment plants using metal tanks of sufficient wall thickness.

(3) Basins and Wet-Well.

Receiving basins and pump wet-wells for finished drinking water shall be designed as drinking water storage structures. (See Section R309-545)

R309-525-17. Miscellaneous Plant Facilities.

(1) Laboratory.

Sufficient laboratory equipment shall be provided to assure proper operation and monitoring of the water plant. A list of required laboratory equipment is:

(a) one floc testing apparatus with illuminated base and variable speed stirrer,

(b) 10 each 1000 ml Griffin beakers (plastic is highly recommended over glass to prevent breakage),

(c) one 1000 ml graduated cylinder (plastic is highly recommended over glass to prevent breakage),

(d) pH test strips (6.0 to 8.5),

(e) five wide mouth 25 ml Mohr pipets,

(f) one triple beam, single pan or double pan balance with 0.1 g sensitivity and 2000 g capacity (using attachment weights),

(g) DPD chlorine test kit,

(h) bench-top turbidimeter,

(i) five each 1000 ml reagent bottles with caps,

- (j) dish soap,
- (k) brush (2 3/4 inch diameter by 5 inch),
- (l) one platform scale 1/2 lb sensitivity, 100 lb capacity,
- (m) book - Simplified Procedures for Water Examination, AWWA Manual M12
- (2) Continuous Turbidity Monitoring and Recording Equipment.

Continuous turbidity monitoring and recording facilities shall be located as specified in R309-215-9.

- (3) Sanitary and Other Conveniences.

All treatment plants shall be provided with finished drinking water, lavatory and toilet facilities unless such facilities are otherwise conveniently available. Plumbing must conform to the Utah Plumbing Code and must be so installed to prevent contamination of a public water supply.

R309-525-18. Sample Taps.

Sample taps shall be provided so that water samples can be obtained from appropriate locations in each unit operation of treatment. Taps shall be consistent with sampling needs and shall not be of the petcock type. Taps used for obtaining samples for bacteriological analysis shall be of the smooth-nosed type without interior or exterior threads, shall not be of the mixing type, and shall not have a screen, aerator, or other such appurtenance.

R309-525-19. Operation and Maintenance Manuals.

Operation and maintenance manuals shall be prepared for the treatment plant and found to be acceptable by the Director. The manuals shall be usable and easily understood. They shall describe normal operating procedures, maintenance procedures and emergency procedures.

R309-525-20. Operator Instruction.

Provisions shall be made for operator instruction at the start-up of a plant.

R309-525-21. Safety.

All facilities shall be designed and constructed with due regard for safety, comfort and convenience. As a minimum, all applicable requirements of Utah Occupational Safety and Health Act (UOSHA) must be adhered to.

R309-525-22. Disinfection Prior To Use.

All pipes, tanks, and equipment which can convey or store finished drinking water shall be disinfected in accordance with the following AWWA procedures:

- (1) C651-05 Disinfecting Water Mains
- (2) C652-02 Disinfection of Water Storage Facilities
- (3) C653-03 Disinfection of Water Treatment Plants

R309-525-23. Disposal of Treatment Plant Waste.

Provisions must be made for proper disposal of water treatment plant waste such as sanitary, laboratory, sludge, and filter backwash water. All waste discharges and treatment facilities shall meet the requirements of the plumbing code, the Utah Department of Environmental Quality, the Utah Department of Health, and the United States Environmental Protection Agency, including the following:

- (1) Rules for Onsite Wastewater Disposal Systems, Utah Administrative Code R317-4.
- (2) Rules for Water Quality, Utah Administrative Code R317.
- (3) Rules for Solid and Hazardous Waste, Utah Administrative Code R315.

In locating waste disposal facilities, due consideration shall be given to preventing potential contamination of a water supply as well as breach or damage due to environmental factors.

R309-525-24. Other Considerations.

Consideration shall be given to the design requirements of other federal, state, and local regulatory agencies for items such as safety requirements, special designs for the handicapped, plumbing and electrical codes, construction in the flood plain, etc.

R309-525-25. Operation and Maintenance.

- (1) Water system operators must determine that all chemicals added to water intended for human consumption are suitable for drinking water use and comply with ANSI/NSF Standard 60.

(2) No chemicals or other substances may be added to public water supplies unless the chemical addition facilities and chemical type have been reviewed and approved by the Director. The Director shall be notified prior to the changing of primary coagulant type. The Director may require documentation to verify that sufficient testing and analysis have been done. The primary coagulant may not be changed without prior approval from the Director.

(3) During the operation of a conventional surface water treatment plant stable flow rates shall be maintained through the filters.

(4) All instrumentation needed to verify that treatment processes are sufficient shall be properly calibrated and maintained. As a minimum, this shall include turbidimeters.

KEY: drinking water, flocculation, sedimentation, filtration

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19-4-104

R309. Environmental Quality, Drinking Water.
R309-530. Facility Design and Operation: Alternative Surface Water Treatment Methods.

R309-530-1. Purpose.

This rule specifies requirements for alternative surface water treatment methods. It is intended to be applied in conjunction with rules R309-500 through R309-550. Collectively, these rules govern the design, construction, operation and maintenance of public drinking water system facilities. These rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water which consistently meet applicable drinking water quality requirements and do not pose a threat to general public health.

R309-530-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-530-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-530-4. General.

(1) Alternative Methods.

In addition to conventional surface water treatment method (i.e. coagulation, sedimentation and filtration as outlined in R309-525), several alternative methods may also be suitable. They are: Direct Filtration; Slow Sand Filtration; Membrane Filtration; and Diatomaceous Earth Filtration.

(2) Incorporation of Other Rules.

For each process described in this section pertinent rules are given. The designer shall also incorporate the relevant rules given in other sections into the plans and specifications for any of these specialized treatment methods. Where applicable, the following topics shall be addressed:

- (a) Plant Siting (see R309-525-6).
- (b) Pre-design Submittal (see R309-515-5(2)).
- (c) Plant Reliability (see R309-525-7).
- (d) Color Coding and Pipe Marking (see R309-525-8).
- (e) Chemical Addition (see R309-525-11).
- (f) Miscellaneous Plant Facilities (see R309-525-17, particularly sub-section R309-525-17(1), Laboratory).
- (g) Operation and Maintenance Manuals (see R309-525-19).
- (h) Safety (see R309-525-21).
- (i) Disposal of Treatment Plant Waste (see R309-525-23).
- (j) Disinfection (see R309-520).

R309-530-5. Direct Filtration.

(1) Chemical Addition and Mixing.

Direct Filtration is conventional surface water treatment without the sedimentation process. Rules for Chemical Addition and Mixing shall be the same as found in sections R309-525-11 and R309-525-12.

(2) Source Water Quality.

Direct Filtration applies the destabilized colloids to the filter rather than removing the majority of the load through sedimentation. While this process represents considerable construction cost savings, the source water must have low average turbidity in order to provide reliable service without excessive backwash requirements. Source water with low average turbidity is generally only obtained from large capacity reservoirs.

(3) Design Requirements.

The following requirements shall apply to Direct Filtration plants:

(a) At least one year's record of source water turbidity, sampled at least once per week, shall be presented to the Director. A Direct Filtration facility will only be permitted if the data shows that 75% of the measurements are below five (5) NTU. The Director shall judge whether Direct Filtration is suitable given the quality of the proposed source water (see R309-515-5(2)(a)(ii)).

(b) Pilot plant studies, acceptable to the Director, shall be conducted prior to the preparation of final engineering plans.

(c) Requirements for flash mix and flocculation basin design are given in sub-sections R309-525-12(1) and R309-525-12(2).

(d) Chemical addition and mixing equipment shall be designed to be capable of providing a visible, but not necessarily settleable, floc.

(e) Surface wash, subsurface wash, or air scour shall be provided for the filters in accordance with sub-section R309-525-15(7).

(f) A continuous monitoring turbidimeter shall be installed on each filter effluent line and shall be of a type with at least two alarm conditions capable of meeting the requirements of subsections R309-525-15(4)(b)(vi) or R309-525-15(4)(c)(vii). The combined plant effluent shall be equipped with a continuous turbidimeter having a chart recorder. Additional monitoring equipment to assist in control of the coagulant dose may be required (i.e. streaming current gauges, particle counters, etc.) if the plant cannot consistently meet the requirements of rule R309-200.

(g) In addition to the alarm conditions required above, the plant shall be designed and operated so that the plant will automatically shut down when a source water turbidity of 20 NTU lasts longer than three hours, or when the source water turbidity exceeds 30 NTU at any time.

(h) The plant design and land ownership surrounding the plant shall allow for the installation of conventional sedimentation basins. Sedimentation basins may be required if the Director determines the plant is failing to meet minimum water quality or performance standards.

R309-530-6. Slow Sand Filtration.

(1) Acceptability.

Slow sand filtration means a process involving passage of raw water through a bed of sand at low velocity resulting in substantial particle removal by physical and biological mechanisms. The acceptability of slow sand filters as a substitute for "conventional surface water treatment" facilities (detailed in R309-525) shall be determined by the Director based on suitability of the source water and demand characteristics of the system.

(2) Source Water Quality.

The Director may impose design requirements in addition to those listed herein, in allowing this process. The following shall be considered, among other factors, in determining whether slow sand filtration will be acceptable:

(a) Source water turbidity must be low and consistent. Slow Sand Filtration shall be utilized only when the source waters have turbidity less than 50 NTU and color less than 30 units (see R309-515-5(2)(a)).

(b) The nature of the turbidity particles shall be considered. Turbidity must not be attributable to colloidal clay.

(c) The nature and extent of algae growths in the raw water shall be considered. Algae must not be a species considered as filter and screen-clogging algae as indicated in "Standard Methods for the Examination of Water and Wastewater" prepared and published jointly by American

Public Health Association, American Water Works Association, and Water Environment Federation. High concentrations of algae in the raw water can cause short filter runs; the amount of algae, expressed as the concentration of chlorophyll "a" in the raw water shall not exceed 0.005 mg/l.

(3) Pilot Plant Studies.

The Director shall allow the use of Slow Sand Filtration only when the supplier's engineering studies show that the slow sand facility can consistently produce an effluent meeting the quality requirements of rule R309-200. The Director should be consulted prior to the detailed design of a slow sand facility.

(4) Operation.

Effluent from a Slow Sand Filtration facility shall not be introduced into a public water supply until an active biological mat has been created on the filter.

(5) Design requirements.

The following design parameters shall apply to each Slow Sand Filtration plant:

(a) At least three filter units shall be provided. Where only three units are provided, any two shall be capable of meeting the plant's design capacity (normally the projected "peak daily flow") at the approved filtration rate. Where more than three filter units are provided, the filters shall be capable of meeting the plant design capacity at the approved filtration rate with any one filter removed from service.

(b) All filters shall be protected to prevent freezing. If covered by a structure, enough headroom shall exist to permit normal movement by operating personnel for scraping and sand removal operations. There shall be adequate manholes and access ports for the handling of sand. An overflow at the maximum filter water level shall be provided.

(c) The permissible rates of filtration shall be determined by the quality of the source water and shall be determined by experimental data derived during pilot studies conducted on the source water. Filtration rates of 0.03 gpm/sf to 0.1 gpm/sf shall be acceptable (equivalent to two to six million gallons per day per acre). Somewhat higher rates may be acceptable when demonstrated to the satisfaction of the Director.

(d) Each filter unit shall be equipped with a main drain and an adequate number of lateral underdrains to collect the filtered water. The underdrains shall be so spaced that the maximum velocity of the water flow in the underdrain will not exceed 0.75 fps. The maximum spacing of the laterals shall not exceed three feet if pipe laterals are used.

(e) Filter sand shall be placed on graded gravel layers for an initial filter sand depth of 30 inches. A minimum of 24 inches of filter sand shall be present, even after scraping. The effective size of the filter sand shall be between 0.30 mm and 0.45 mm in diameter. The filter sand uniformity coefficient shall not exceed 2.5. Further, the sand shall thoroughly washed and found to be clean and free from foreign matter.

(f) A three-inch layer of well rounded sand shall be used as a supporting media for filter sand. It shall have an effective size of 0.8 mm to 2.0 mm in diameter and the uniformity coefficient shall not be greater than 1.7.

(g) A supporting gravel media shall be provided. It shall consist of hard, durable, rounded silica particles and shall not include flat or elongated particles. The coarsest gravel shall be 2.5 inches in size when the gravel rests directly on the strainer system, and must extend above the top of the perforated laterals. Not less than four layers of gravel shall be provided in accordance with the following size and depth distribution when used with perforated laterals:

1 1/2 to 3/4 inches	3 to 5 inches
3/4 to 1/2 inches	3 to 5 inches
1/2 to 3/16 inches	2 to 3 inches
3/16 to 3/32 inches	2 to 3 inches

Reduction of gravel depths may be considered upon justification to the Director when proprietary filter bottoms are specified.

(h) Slow sand filters shall be designed to provide a depth of at least three to five feet of water over the sand.

(i) Each filter shall be equipped with: a loss of head gauge; an orifice, venturi meter, or other suitable metering device installed on each filter to control the rate of filtration; and an effluent pipe designed to maintain the water level above the top of the filter sand.

(j) Disinfection of the effluent of Slow Sand Filtration plants will be required.

(k) A filter-to-waste provision shall be included.

(l) Electrical power shall be available at the plant site.

R309-530-7. Diatomaceous Earth Filtration.

The use of Diatomaceous Earth Filtration units may be considered for application to surface waters with low turbidity and low bacterial contamination, and additionally may be used for iron removal for groundwaters of low quality, providing the removal is effective and the water is of sanitary quality before treatment.

The acceptability of Diatomaceous Earth Filtration as a substitute for "conventional surface water treatment" facilities (detailed in rule R309-525) shall be determined by the Director. Determination may be based on the level of support previously exhibited by the public water system management along with a finding by the Director that "conventional surface water treatment" or other methods herein described are too costly or unacceptable.

Diatomaceous Earth Filtration consists of a process to remove particles from water wherein a precoat cake of diatomaceous earth filter media is deposited on a support membrane (septum), and while the water is filtered by passing through the cake on the septum, additional filter media known as body feed is continuously added to the source water to maintain the permeability of the filter cake. Diatomite filters are characterized by rigorous operating requirements, high operating costs, and increased sludge production.

Part 4, Section 4.2.3, Diatomaceous Earth Filtration, in the Recommended Standards for Water Works (commonly known as "Ten State Standards"), 2007 edition is hereby incorporated by reference and compliance with those standards shall be required for the design and operation of diatomaceous earth filtration facilities. This document is published by the Great Lakes-Upper Mississippi River Board of Public Health and Environmental Managers. A copy is available in the office of the Division for reference.

R309-530-8. Membrane Technology.

(1) Acceptability.

Surface waters, or groundwater under the direct influence of surface water (UDI), may be treated using membrane technology (microfiltration, ultrafiltration, nanofiltration) coupled with "primary and secondary disinfection."

(2) Pilot Plant Study.

Because this is a relatively new technology, appropriate investigation shall be conducted by the public water system to assure that the process will produce the required quality of water at a cost which can be borne by the public water system consumers. A pilot plant study shall be conducted prior to the commencement of design. The study must be conducted in accordance with EPA's Environmental Technology Verification Program (ETV) or the protocol and treated water

TABLE 530-1

Size	Depth
2 1/2 to 1 1/2 inches	5 to 8 inches

parameters must be approved prior to conducting any testing by the Director.

(3) Design Requirements.

The following items shall be addressed in the design of any membrane technology plant intended to provide microbiological treatment of surface waters or groundwater "UDI:"

(a) The facility shall be equipped with an on-line particle counter on the final effluent.

(b) The facility shall be equipped with an automatic membrane integrity test system.

(4) The Director shall establish the turbidity limit for 95% of turbidity measurements and the maximum turbidity limit which shall not be exceeded. The plant effluent shall meet the requirements of R309-200-5(5)(a)(ii).

R309-530-9. New Treatment Processes or Equipment.

The policy of the Board is to encourage, rather than to obstruct, the development of new methods and equipment for the treatment of water. Nevertheless, any new processes or equipment must have been thoroughly tested in full-scale, comparable installations, before approval of plans can be issued. Refer to EPA's Environmental Technology Verification Program (ETV).

No new treatment process will be approved for use in Utah unless the designer or supplier can present evidence satisfactory to the Director that the process will insure the delivery of water of safe, sanitary quality, without imposing undue problems of supervision, operation and/or control.

The Director shall establish the turbidity limit for 95% of turbidity measurements and the maximum turbidity limit which shall not be exceeded. The plant effluent shall meet the requirements of R309-200-5(5)(a)(ii).

KEY: drinking water, direct filtration, slow sand filtration, membrane technology

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R309. Environmental Quality, Drinking Water.**R309-535. Facility Design and Operation: Miscellaneous Treatment Methods.****R309-535-1. Purpose.**

The purpose of this rule is to provide specific requirements for miscellaneous water treatment methods which are primarily intended to remove chemical contaminants from drinking water; or, adjust the chemical composition of drinking water. It is intended to be applied in conjunction with other rules, specifically R309-500 through R309-550. Collectively, these rules govern the design, construction, operation and maintenance of public drinking water system facilities. These rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water which consistently meet applicable drinking water quality requirements and do not pose a threat to general public health.

R309-535-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-535-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-535-4. General.

For each process described in this section pertinent rules are given. The designer must also, however, incorporate the relevant rules given in other sections into the plans and specifications for any of these specialized treatment methods. Where applicable, the following topics must be addressed:

- (1) Plant Siting (see R309-525-6).
- (2) Plant Reliability (see R309-525-7).
- (3) Color Coding and Pipe Marking (see R309-525-8).
- (4) Chemical Addition (see R309-525-11).
- (5) Miscellaneous Plant Facilities (see R309-525-17, particularly sub-section R309-525-17(1), Laboratory).
- (6) Operation and Maintenance Manuals (see R309-525-19).
- (7) Safety (see R309-525-21).
- (8) Disposal of Treatment Plant Waste (see R309-525-23).
- (9) Disinfection (see R309-520).

R309-535-5. Fluoridation.

Sodium fluoride, sodium silicofluoride and fluorosilicic acid shall conform to the applicable AWWA standards and/or ANSI/NSF Standard 60. Other fluoride compounds which may be available must be approved by the Director.

- (1) Fluoride compound storage.

Fluoride chemicals shall be isolated from other chemicals to prevent contamination. Compounds shall be stored in covered or unopened shipping containers and shall be stored inside a building. Unsealed storage units for fluorosilicic acid shall be vented to the atmosphere at a point outside any building. Bags, fiber drums and steel drums shall be stored on pallets.

- (2) Chemical feed equipment and methods.

In addition to the requirements in R309-525-11 "Chemical Addition", fluoride feed equipment shall meet the following requirements:

(a) scales, loss-of-weight recorders or liquid level indicators, as appropriate, accurate to within five percent of the average daily change in reading shall be provided for chemical feeds,

(b) feeders shall be accurate to within five percent of any desired feed rate,

(c) fluoride compound shall not be added before lime-soda softening or ion exchange softening,

(d) the point of application of fluorosilicic acid, if into a horizontal pipe, shall be in the lower half of the pipe,

(e) a fluoride solution shall be applied by a positive displacement pump having a stroke rate not less than 20 strokes per minute,

(f) a spring opposed diaphragm type anti-siphon device shall be provided for all fluoride feed lines and dilution water lines,

(g) a device to measure the flow of water to be treated is required,

(h) the dilution water pipe shall terminate at least two pipe diameters above the solution tank,

(i) water used for sodium fluoride dissolution shall be softened if hardness exceeds 75 mg/l as calcium carbonate,

(j) fluoride solutions shall be injected at a point of continuous positive pressure or a suitable air gap provided,

(k) the electrical outlet used for the fluoride feed pump shall have a nonstandard receptacle and shall be interconnected with the well or service pump,

(l) saturators shall be of the upflow type and be provided with a meter and backflow protection on the makeup water line.

(m) lead weights shall not be used in fluoride chemical solutions to keep pump suction lines at the bottom of a day or bulk storage tank.

(3) Secondary controls.

Secondary control systems for fluoride chemical feed devices shall be provided as a means of reducing the possibility for overfeed; these may include flow or pressure switches or other devices.

(4) Protective equipment.

Personal protective equipment as outlined in R309-525-11(10) shall be provided for operators handling fluoride compounds. Deluge showers and eye wash devices shall be provided at all fluorosilicic acid installations.

(5) Dust control.

(a) Provision must be made for the transfer of dry fluoride compounds from shipping containers to storage bins or hoppers in such a way as to minimize the quantity of fluoride dust which may enter the room in which the equipment is installed. The enclosure shall be provided with an exhaust fan and dust filter which place the hopper under a negative pressure. Air exhausted from fluoride handling equipment shall discharge through a dust filter to the outside atmosphere of the building.

(b) Provision shall be made for disposing of empty bags, drums or barrels in a manner which will minimize exposure to fluoride dusts. A floor drain shall be provided to facilitate the hosing of floors.

(6) Testing equipment.

Equipment shall be provided for measuring the quantity of fluoride in the water. Such equipment shall be subject to the approval of the Director.

R309-535-6. Taste and Odor Control.

Part 4, Section 4.9, Taste and Odor Control, in the Recommended Standards for Water Works (commonly known as "Ten State Standards"), 2007 edition is hereby incorporated by reference and compliance with those standards shall be required for the design and operation of taste and odor control facilities. This document is published by the Great Lakes-Upper Mississippi River Board of Public Health and Environmental Managers. A copy is available in the office of the Division for reference.

R309-535-7. Stabilization.

Part 4, Section 4.8, Stabilization, in the Recommended Standards for Water Works (commonly known as "Ten State Standards"), 2007 edition is hereby incorporated by reference and compliance with those standards shall be required for the design and operation of stabilization facilities. This document is published by the Great Lakes-Upper Mississippi River Board of Public Health and Environmental Managers. A copy is available in the office of the Division for reference.

R309-535-8. Deionization.

Current practical methods of deionization include Ion Exchange, Reverse Osmosis and Electrodialysis. Additional methods of deionization may be approved subject to the presentation of evidence of satisfactory reliability.

All properly developed groundwater sources having water quality exceeding 2,000 mg/l Total Dissolved Solids and/or 500 mg/l Sulfate shall be either properly diluted or treated by the methods outlined in this section. Deionization cannot be considered a substitute process for conventional complete treatment outlined in R309-525.

(1) Ion Exchange.

(a) General.

Great care shall be taken by the designer to avoid loading the media with water high in organics.

(b) Design.

(i) Pretreatment shall be provided per the manufacturer's recommendation.

(ii) Upflow or down flow units are acceptable.

(iii) Exchangers shall have at least a three foot media depth.

(iv) Exchangers shall be designed to meet the recommendations of the media manufacturer with regard to flow rate or contact time. In any case, flow shall not exceed seven gpm/sf of bed area. The plant shall be provided with an influent or effluent meter as well as a meter on any bypass line.

(v) Chemical feeders used shall conform with R309-525-8. All solution tanks shall be covered.

(vi) Regenerants added shall be uniformly distributed over the entire media surface of upflow or downflow units. Regeneration shall be according to the media manufacturer's recommendations.

(vii) The wash rate capability shall be in excess of the manufacturer's recommendation and should be at least six to eight gpm/sf of bed area.

(viii) Disinfection (see R309-520) shall be required ahead of the exchange units where this does not interfere with the media.

Where disinfection interferes with the media, disinfection shall follow the treatment process.

(c) Waste Disposal.

Waste generated by ion exchange treatment shall be disposed of in accordance with R309-525-23.

(2) Reverse Osmosis.

(a) General.

The design shall permit the easy exchange of modules for cleaning or replacement.

(b) Design Criteria.

(i) Pretreatment shall be provided per the manufacturer's recommendation.

(ii) Required equipment includes the following items: pressure gauges on the upstream and downstream side of the filter; a conductivity meter present at the site; taps for sampling permeate, concentrate and blended flows (if practiced). If a continuous conductivity meter is permanently installed, piping shall be such that the meter can be disconnected and calibrated with standard solutions at a frequency as recommended by the manufacturer.

(iii) Aeration, if practiced, shall conform with provisions of R309-535-9.

(iv) Cleaning shall be routinely done in accordance with the manufacturer's recommendations.

(v) Where the feed water pH is altered, stabilization of the finished water is mandatory.

(c) Waste Disposal.

Waste generated by reverse osmosis treatment shall be disposed of in accordance with R309-525-23.

(3) Electrodialysis.

(a) General.

(b) Design.

(i) Pretreatment shall be provided per the manufacturers recommendation.

(ii) The design shall include ability to: measure plant flow rates; measure feed temperature if the water is heated (a high temperature automatic cutoff is required to prevent membrane damage); measure D.C voltage at the first and second stages as well as on each of the stacks. Sampling taps shall be provided to measure the conductivity of the feed water, blowdown water, and product water. D.C. and A.C. kilowatt-hour meters to record the electricity used shall also be provided.

(c) Waste Disposal.

Waste generated by electrodialysis treatment shall be disposed of in accordance with R309-525-23.

R309-535-9. Aeration.

Part 4, Section 4.5, Aeration, in the Recommended Standards for Water Works (commonly known as "Ten State Standards"), 2007 edition, is hereby incorporated by reference and compliance with those standards shall be required for the design and operation of aeration facilities. This document is published by the Great Lakes-Upper Mississippi River Board of Public Health and Environmental Managers. A copy is available in the office of the Division for reference.

R309-535-10. Softening.

Part 4, Section 4.4, Softening, in the Recommended Standards for Water Works (commonly known as "Ten State Standards"), 2007 edition, is hereby incorporated by reference and compliance with those standards shall be required for the design and operation of softening facilities. This document is published by the Great Lakes-Upper Mississippi River Board of Public Health and Environmental Managers. A copy is available in the office of the Division for reference.

R309-535-11. Iron and Manganese Control.

Iron and manganese control, as used herein, refers solely to treatment processes designed specifically for this purpose. The treatment process used will depend upon the character of the source water. The selection of one or more treatment processes shall meet specific local conditions as determined by engineering investigations, including chemical analyses of representative samples of water to be treated, and receive approval of the Director. It may be necessary to operate a pilot plant in order to gather all information pertinent to the design. Consideration should be given to adjust the pH of the raw water to increase the rate of the chemical reactions involved.

Removal or treatment of iron and manganese are normally by the following methods:

(1) Removal by Oxidation, Detention and Filtration.

(a) Oxidation.

Oxidation may be by aeration, or by chemical oxidation with chlorine, potassium permanganate, ozone or chlorine dioxide.

(b) Detention.

(i) Reaction time - A minimum detention time of twenty

minutes shall be provided following aeration in order to insure that the oxidation reactions are as complete as possible. This minimum detention may be omitted only where a pilot plant study indicates no need for detention. The detention basin shall be designed as a holding tank with no provisions for sludge collection but with sufficient baffling to prevent short circuiting.

(ii) Sedimentation - Sedimentation basins shall be provided when treating water with high iron and/or manganese content, or where chemical coagulation is used to reduce the load on the filters. Provisions for sludge removal shall be made.

(c) Filtration.

(i) General - Minimum criteria relative to number, rate of filtration, structural details and hydraulics, filter media, etc., provided for rapid rate gravity filters shall apply to pressure filters where appropriate, and may be used in this application but cannot be used in the filtration of surface waters or following lime-soda softening.

(ii) Details of Design for Pressure Filter - The filters shall be designed to provide for:

(A) Loss of head gauges on the inlet and outlet pipes of each filter,

(B) An easily readable meter or flow indicator on each battery of filters,

(C) Filtration and backwashing of each filter individually with an arrangement of piping as simple as possible to accomplish these purposes,

(D) The top of the washwater collectors to be at least twenty-four (24) inches above the surface of the media,

(E) The underdrain system to efficiently collect the filtered water and to uniformly distribute the backwash water at a rate capable of not less than 15 gpm/sf of filter area,

(F) Backwash flow indicators and controls that are easily readable while operating the control valves,

(G) An air release valve on the highest point of each filter,

(H) An accessible manhole to facilitate inspections and repairs,

(I) Means to observe the wastewater and filters during backwashing, and

(J) Construction to prevent cross-connection.

(2) Removal by the Lime-soda Softening Process.

For removal by the lime-soda softening process refer to Part 4, Section 4.4, Softening, in the Recommended Standards for Water Works (commonly known as "Ten State Standards"), 2007 edition as indicated in R309-535-10. Those standards are hereby incorporated by reference and compliance with those standards shall be required for removal by the lime-soda softening process.

(3) Removal by Manganese Greensand Filtration.

This process, consisting of the continuous feed of potassium permanganate to the influent of a manganese greensand filter, is more applicable to the removal of manganese than the removal of iron.

(a) Provisions shall be made to apply the permanganate as far ahead of the filter as practical and at a point immediately before the filter.

(b) An anthracite media cap of at least six inches shall be provided over manganese greensand.

(c) The normal filtration rate is three gpm/sf.

(d) The normal wash rate is 8 to 10 gpm/sf.

(e) Air washing shall be provided.

(f) Sample taps shall be provided:

(i) prior to application of permanganate,

(ii) immediately ahead of filtration,

(iii) at a point between the anthracite media and the manganese greensand,

(iv) halfway down the manganese greensand, and

(v) at the filter effluent.

(4) Removal by Ion Exchange.

This process is not acceptable where either the source water or wash water contains dissolved oxygen.

(5) Sequestration by Polyphosphates.

This process shall not be used when iron, manganese or a combination thereof exceeds 1.0 milligram per liter. The total phosphate applied shall not exceed 10 milligrams per liter as PO_4 . Where phosphate treatment is used, satisfactory chlorine residuals shall be maintained in the distribution system and the following required:

(a) feeding equipment shall conform to the requirements of R309-525-11(7),

(b) stock phosphate solution shall be kept covered and disinfected by carrying approximately 10 mg/l free chlorine residual,

(c) polyphosphates shall not be applied ahead of iron and manganese removal treatment. If no iron or manganese removal treatment is provided, the point of application shall be prior to any aeration, oxidation or disinfection steps, and

(d) phosphate chemicals must comply with ANSI/NSF Standard 60.

Sampling taps shall be provided for control purposes. Taps shall be located on each raw water source, and on each treatment unit influent and effluent.

Waste generated by iron and manganese control treatment shall be disposed of in accordance with R309-525-23.

R309-535-12. Point-of-Use and Point-of-Entry Treatment Devices.

Where drinking water does not meet the quality standards of R309-200 and the available water system treatment methods are determined to be unreasonably costly or otherwise undesirable, the Director may permit the public water supplier to install and maintain point-of-use or point-of-entry treatment devices. This approval shall only be given after receipt and satisfactory review of the following items.

(1) The Director shall only consider approving point-of-use or point-of-entry treatment upon receipt of an analysis that clearly demonstrates that central treatment is not feasible for the public water system. Unless waived by the Director, this analysis shall be in the form of an engineering report prepared by a professional engineer registered in the State of Utah. Systems serving fewer than 75 connections are excused from performing an analysis by a Registered Professional Engineer.

(2) The water system shall have a signed access agreement with each customer that allows water system personnel to enter their property on a scheduled basis to install and maintain the treatment devices. The agreement shall include educational information with regard to the health risks of consuming or cooking with water from non-treated taps. Systems with an initial 75% of their connections under a signed access agreement shall be allowed to proceed with the understanding that 100% of their connections are due within a 5 year period. For public water systems that own or control all connections to the public water system, this requirement will not apply.

(3) Documentation that legal authority, which includes a termination of service clause, has been adopted to ensure water system access to the property for installation, maintenance, servicing and sampling of each treatment unit. For public water systems that own or control all connections to the public water system, this requirement will not apply.

(4) Point-of-use or point-of-entry treatment devices used shall only be those proven to be appropriate, safe and effective as determined through testing and compliance with protocols established by EPA's Environmental Technology

Verification Program (ETV) or the applicable ANSI/NSF Standard(s). A pilot study may be required to determine the suitability of the point-of-use or point-of-entry device in treating a particular source water. The scope and duration of the pilot study shall be determined by such factors as the characteristics of the raw water, manufacturer's ratings of the treatment device, and good engineering practices. The pilot study will generate data on service intervals, aid in specifying and calibrating alarm systems, and reveal any site specific problems with component fouling or microbial colonization.

(5) The water system shall provide an operation and maintenance plan demonstrating that the treatment units shall be installed and serviced in accordance with the manufacturer's instructions and that compliance sampling as required in R309-215-6 shall take place. The system shall provide documentation of an operation and maintenance contract or schedule annually as required in R309-105-16(4). If the operation and maintenance of the POU/POE devices is performed by water system personnel, it shall only be performed by a water operator certified at the level of the water system.

(6) The performance indicating device for the point-of-use/point-of-entry treatment device that will be used shall be specified in the submittal for plan approval.

(7) The water system shall submit a customer education and out-reach plan that includes at a minimum annual frequency of contact.

(8) Point-of-use or point-of-entry treatment devices for compliance with the nitrate MCL shall only be considered if treatment is provided at all taps that are accessible to the public.

R309-535-13. New Treatment Processes or Equipment.

The policy of the Board is to encourage, rather than to obstruct, the development of new methods and equipment for the treatment of water. Nevertheless, any new processes or equipment must have been thoroughly tested in full-scale, comparable installations, before approval of plans can be issued. The U.S. Environmental Protection Agency (EPA) has created the Environmental Technology Verification (ETV) Program to facilitate the deployment of innovative or improved environmental technologies through performance verification and dissemination of information. NSF International (NSF) in cooperation with the EPA operates the Package Drinking Water Treatment Systems (PDWTS) pilot, one of 12 technology areas under ETV. Engineers and Manufacturers are referred to Manager, ETV project, NSF International, P.O. Box 130140, Ann Arbor, Michigan 48113-0140.

No new treatment process will be approved for use in Utah unless the designer or supplier can present evidence satisfactory to the Director that the process will insure the delivery of water of safe, sanitary quality, without imposing undue problems of supervision, operation and/or control.

KEY: drinking water, miscellaneous treatment, stabilization, iron and manganese control

August 28, 2013

19-4-104

Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.**R309-540. Facility Design and Operation: Pump Stations.****R309-540-1. Purpose.**

The purpose of this rule is to provide specific requirements for pump stations utilized to deliver drinking water to facilities of public water systems. It is intended to be applied in conjunction with rules R309-500 through R309-550. Collectively, these rules govern the design, construction, operation and maintenance of public drinking water system facilities. These rules are intended to assure that such facilities are reliably capable of supplying adequate quantities of water which consistently meet applicable drinking water quality requirements and do not pose a threat to general public health.

R309-540-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with 63G-3 of the same, known as the Administrative Rulemaking Act.

R309-540-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-540-4. General.

Pumping stations shall be designed to maintain the sanitary quality of water and to provide ample quantities of water at sufficient pressure.

R309-540-5. Pumping Facilities.**(1) Location.****(a) The pumping station shall be designed such that:**

(i) the proposed site will meet the requirements for sanitary protection of water quality, hydraulics of the system, and protection against interruption of service by fire, flood or any other hazard;

(ii) the access to the pump station shall be six inches above the surrounding ground and the station located at an elevation which is a minimum of three feet above the 100-year flood elevation, or three feet above the highest recorded flood elevation, which ever is higher, or protected to such elevations;

(iii) the station is readily accessible at all times unless permitted to be out of service for the period of inaccessibility;

(iv) surrounding ground is graded so as to lead surface drainage away from the station; and

(v) the station is protected to prevent vandalism and entrance by animals or unauthorized persons.

(2) Pumping Stations.**(a) Building structures for both raw and drinking water shall:**

(i) have adequate space for the installation of additional pumping units if needed, and for the safe servicing of all equipment;

(ii) be of durable construction, fire and weather resistant, with outward-opening doors;

(iii) have an interior floor elevation at least six inches above the exterior finished grade;

(iv) have any underground facilities, especially wet wells, waterproofed;

(v) have all interior floors drained in such a manner that the quality of drinking water contained in any wet wells will not be endangered. All floors shall slope at least one percent (one foot every 100 feet) to a suitable drain; and

(vi) provide a suitable outlet for drainage from pump glands without discharging onto the floor.

(b) Suction wells shall:

(i) be watertight;

(ii) have floors sloped to permit removal of water and entrained solids;

(iii) be covered or otherwise protected against contamination; and

(iv) have two pumping compartments or other means to allow the suction well to be taken out of service for inspection, maintenance, or repair.

(c) Servicing equipment shall consist of:

(i) crane-ways, hoist beams, eyebolts, or other adequate facilities for servicing or removal of pumps, motors or other heavy equipment;

(ii) openings in floors, roofs or wherever else needed for removal of heavy or bulky equipment; and

(iii) a convenient tool board, or other facilities as needed, for proper maintenance of the equipment.

(d) Stairways and ladders shall:

(i) be provided between all floors, and in pits or compartments which must be entered; and

(ii) have handrails on both sides, and treads of non-slip material. They shall have risers not exceeding nine inches and treads wide enough for safety.

(e) Heating provisions shall be adequate for:

(i) the comfort of the operator; and

(ii) the safe and efficient operation of the equipment.

(f) Ventilation shall:

(i) conform to existing local and/or state codes; and

(ii) forced ventilation of at least six changes of air per hour shall be provided for all rooms, compartments, pits and other enclosures below ground floor, and any area where unsafe atmosphere may develop or where excessive heat may be built up.

(g) Lighting.

Pump stations shall be adequately lighted throughout. All electrical work shall conform to the requirements of the relevant state and/or local building codes.

(h) Sanitary and other conveniences.

Plumbing shall be so installed as to prevent contamination of a public water supply. Wastes shall be discharged in accordance with the plumbing code, R317-4, or R317-1-3.

(3) Pumps.**(a) Capacity.**

Capacity shall be provided such that the pump or pumps shall be capable of providing the peak day demand of the system or the specific portion of the system serviced.

The pumping units shall:

(i) have ample capacity to supply the peak day demand against the required distribution system pressure without dangerous overloading;

(ii) be driven by prime movers able to meet the maximum horsepower condition of the pumps without use of service factors;

(iii) be provided readily available spare parts and tools; and

(iv) be served by control equipment that has proper heater and overload protection for air temperature encountered.

(b) Suction Lift.

Suction lift, where possible, shall be avoided. If suction lift is necessary, the required lift shall be within the pump manufacturer's recommended limits and provision shall be made for priming the pumps.

(c) Priming.

Prime water shall not be of lesser sanitary quality than that of the water being pumped. Means shall be provided to prevent back siphonage. When an air-operated ejector is used, the screened intake shall draw clean air from a point at least 10 feet above the ground or other source.

(4) Booster Pumps.

(a) Booster pumps shall be located or controlled so that:

(i) they will not produce negative pressure in their suction lines;

(ii) automatic cutoff pressure shall be at least 10 psi in the suction line;

(iii) automatic or remote control devices shall have a range between the start and cutoff pressure which will prevent excessive cycling; and

(iv) a bypass is available.

(b) Inline booster pumps (pumps withdrawing water directly from distribution lines without the benefit of storage and feeding such water directly into other distribution lines rather than storage), in addition to the other requirements of this section, shall have at least two pumping units (such that with any one pump out of service, the remaining pump or pumps shall be capable of providing the peak day demand of the specific portion of the system serviced), shall be accessible for servicing and repair and located or controlled so that the intake pressure shall be at least 20 psi when the pump or pumps are in normal operation.

(c) Individual home booster pumps shall not be allowed for any individual service from the public water supply main.

(5) Automatic and remote controlled stations.

All remote controlled stations shall be electrically operated and controlled and shall have signaling apparatus of proven performance. Installation of electrical equipment shall conform with the applicable state and local electrical codes and the National Electrical Code.

(6) Appurtenances.

(a) Valves.

Valves shall be used to permit satisfactory operation, maintenance, and repair of the equipment. If foot valves are necessary, they shall have a net valve area of at least 2 1/2 times the area of the suction pipe and they shall have a positive-acting check valve on the discharge side between the pump and the shut-off valve.

(b) Piping.

Piping within and near pumping stations shall:

(i) be designed so that the friction losses will be minimized;

(ii) not be subject to contamination;

(iii) have watertight joints;

(iv) be protected against surge or water hammer; and

(v) be such that each pump has an individual suction line or that the lines shall be so manifolded that they will insure similar hydraulic and operating conditions.

(c) Gauges and Meters.

Each pump shall:

(i) have a standard pressure gauge on its discharge line;

(ii) have a compound gauge (capable of indicating negative pressure or vacuum as well as positive pressure) on its suction line; and

(iii) have recording gauges in the larger stations.

(d) Water Seal.

Where pumps utilize water seals, the seals shall:

(i) not be supplied with water of a lesser sanitary quality than that of the water being pumped; and

(ii) when pumps are sealed with potable water and are pumping water of lesser sanitary quality, the seal shall be provided with a break tank open to atmospheric pressure, and have an air gap of at least six inches or two pipe diameters, whichever is greater, between the feeder line and the spill line of the tank.

(e) Controls.

Controls shall be designed in such a manner that they will operate their prime movers, and accessories, at the rated capacity without dangerous overload. Where two or more pumps are installed, provision shall be made for alternation.

Provision shall be made to prevent energizing the motor in the event of a backspin cycle. Electrical controls shall be protected against flooding. Equipment shall be provided or other arrangements made to prevent surge pressures from activating controls which switch on pumps or activate other equipment outside the normal design cycle of operation.

(f) Standby Power.

Standby power, to ensure continuous service when the primary power has been interrupted, shall be provided from at least two independent sources or a standby or an auxiliary source shall be provided. If standby power is provided by onsite generators or engines, the fuel storage and fuel line must be designed to protect the water supply from contamination.

(g) Water Pre-Lubrication.

When automatic pre-lubrication of pump bearings is necessary and an auxiliary direct drive power supply is provided, the pre-lubrication line shall be provided with a valved bypass around the automatic control so that the bearings can, if necessary, be lubricated manually before the pump is started or the pre-lubrication controls shall be wired to the auxiliary power supply.

R309-540-6. Hydropneumatic Systems.

(1) General.

Hydropneumatic systems shall comply with all appropriate sections of R309-540-5 except as otherwise indicated herein.

Unpressurized ground level or elevated storage, designed in accordance with R309-545, shall be provided for community type public water systems or non-transient non-community systems where a demand in excess of the capacity of the source(s) is required, in addition to the diaphragm or air tanks. Diaphragm or air pressure tank storage shall not be considered for fire protection purposes or effective system storage for community type systems.

(2) Location.

If diaphragm or air tanks and appurtenances are located below ground, adequate provisions for drainage, ventilation, maintenance, and flood protection shall be made and the electrical controls shall be located above grade so as to be protected from flooding as required by R309-540-5(6)(e). Any discharge piping from combination air release/vacuum relief valves (air/vac's) or pressure relief valves located in below ground chambers shall comply with all the pertinent requirements of R309-550-6(6).

(3) Operating Pressures.

The system shall be designed to provide minimum pressures in R309-105-9 at all points in the distribution system. A pressure gauge shall be installed on the pressure tank inlet line.

(4) Piping.

In addition to the bypass required by R309-540-5(4)(iv) on the pumps, the diaphragm or air tanks shall have sufficient bypass piping to permit operation of the hydropneumatic system while one or more of the tanks are being repaired, replaced or painted.

(5) Pumps.

At least two pumping units shall be provided except for those type systems not requiring unpressurized storage in R309-540-6(1); they may use the pump within their groundwater source to pressurize the diaphragm or air tanks. With any pump out of service the remaining pump or pumps shall be capable of providing the peak instantaneous demand of the system as described in R309-510-9(2), while recharging the pressure tank at 115 percent of the upper pressure setting. Pump cycling shall not exceed 15 starts per hour, with a maximum of ten starts per hour preferred.

(6) Pressure Tanks.

(a) Pressure tanks shall meet the requirement of state and local laws and regulations for the manufacture and installation of unfired pressure vessels. Interior coatings or diaphragms used in pressure tanks that will come into contact with the drinking water shall comply with ANSI/NSF Standard 61. Non diaphragm pressure tanks shall have an access manhole, a drain, control equipment consisting of pressure gauge, water sight glass, automatic or manual air blow-off, means for adding air, and pressure operated start-stop controls for the pumps.

(b) The minimum volume of the pressure tank or combination of tanks shall be greater than or equal to the sum of S and the value of CX divided by 4W.

where the following values are used in the equation above:

C = minutes per operating cycle, four minutes to meet the requirements of R309-540-6(5) above or preferably six minutes, and is equal to pump ON time plus pump OFF time.

X = output capacity rating of the pump(s) at the high pressure condition in the tank(s), in gpm.

W = percent of volume withdrawn during a given drop in tank pressure: specifically, between P_h and P_l . $W = 100(P_h - P_l)/P_h$ where P_h = high pressure in tank in psia (high absolute pressure) and P_l = low pressure in tank is psia (low absolute pressure). Values of W range typically from 0.26 to 0.31 for pressure differentials of 15 to 30 psi and high system pressures of 45 to 85 psi at elevations of approximately 5,000 feet.

S = water seal volume in gallons, the volume of inactive water remaining in tank at low pressure condition.

(7) Air Volume.

The method of adjusting the air volume shall be acceptable to the Director. Air delivered by compressors to the pressure tank shall be adequately filtered, oil free, and be of adequate volume. Any intake shall be screened and draw clean air from a point at least 10 feet above the ground or other source of possible contamination, unless the air is filtered by an apparatus approved by the Director. Discharge piping from air relief valves shall be designed and installed with screens to eliminate the possibility of contamination from this source.

(8) Water Seal.

For air pressure tanks without an internal diaphragm the volume of water remaining in a air pressure tank at the lower pressure setting shall be sufficient to provide an adequate water seal at the outlet to prevent the leakage of air.

The following water seal depths shall be considered as minimum requirements.

(a) Horizontal outlets shall maintain sufficient depth, as measured from the centerline of the horizontal outlet pipe, such that the depth is greater than or equal to the sum of d and twice the value v^2 divided by 2G.

(b) Vertical outlets, if unbaffled, the depth shall be the same as in (a) except measured from the pipe outlet; if baffled, the depth shall be greater than or equal to the value v^2 divided by 2G.

where the following values are used in the equations above:

v = the axial velocity in the pipe outlet for the peak instantaneous demand flow rate of the system.

d = the diameter of the outlet pipe in ft.

G = the gravitational constant of 32.2 ft/sec/sec.

(9) Standby Power Supply.

Where a hydropneumatic system is intended to serve a public water system, categorized as a community water system as defined in R309-110, a standby source of power shall be provided.

individual home booster pumps

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19-4-104

KEY: drinking water, pumps, hydropneumatic systems,

**R309. Environmental Quality, Drinking Water.
R309-545. Facility Design and Operation: Drinking
Water Storage Tanks.****R309-545-1. Purpose.**

The purpose of this rule is to provide specific requirements for public drinking water storage tanks. It is intended to be applied in conjunction with other rules, specifically R309-500 through R309-550. Collectively, these rules govern the design, construction, operation, and maintenance of public drinking water system facilities. These rules are intended to assure that facilities are reliably capable of supplying water in adequate quantities, which consistently meeting applicable drinking water quality requirements and not posing a threat to general public health.

R309-545-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-545-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-545-4. General.

Storage for drinking water shall be provided as an integral part of each public drinking water system unless an exception to the rule is approved by the Director. Pipeline volume in transmission or distribution lines shall not be considered part of any storage volumes.

R309-545-5. Size of Tank(s).

Storage tanks shall be sized in accordance with the required minimums of R309-510.

R309-545-6. Tank Material and Structural Adequacy.**(1) Materials.**

The materials used in drinking water storage tanks shall provide stability and durability as well as protect the quality of the stored water. Steel tanks shall be constructed from new, previously unused, plates and designed in accordance with AWWA Standard D100-11.

(2) Structural Design.

The structural design of drinking water storage tanks shall be sufficient for the environment in which they are located.

R309-545-7. Location of Tanks.**(1) Pressure Considerations.**

The location of the tank and the design of the water system shall be such that the minimum working pressure in the distribution system shall meet the minimum pressures as required in R309-105-9.

(2) Connections.

Tanks shall be located at an elevation where present and anticipated connections can be adequately served. System connections shall be placed at elevations such that minimum pressures, as required in R309-105-9, will be continuously maintained.

(3) Sewer Proximity.

Sewers, and similar sources of possible contamination shall be kept at least 50 horizontal feet from the tank.

(4) Standing Surface Water.

The area surrounding a ground-level or buried drinking water storage tank shall be graded in a manner that will prevent surface water from standing within 50 horizontal feet of the tank.

(5) Ability to Isolate.

Drinking water storage tanks shall be designed and located so that they can be isolated from the distribution system. Storage tanks shall be capable of being drained for cleaning or maintenance. Where possible, tanks shall be designed with the ability to be isolated without loss of pressure or service in the distribution system.

(6) Earthquake and Landslide Risks.

Potential geologic hazards shall be taken into account in selecting a tank location. Earthquake and landslide risks shall be evaluated.

(7) Security.

The site location and design of a drinking water storage tank shall take into consideration security issues and potential for vandalism.

R309-545-8. Tank Elevation and Burial.**(1) Flood Elevation.**

The bottom of a ground-level or buried drinking water storage tank shall be located at least 3 feet above the 100-year flood level or the highest known maximum flood elevation, whichever is higher.

(2) Ground Water.

When the bottom of a drinking water storage tank will be placed below the normal ground surface, it shall be placed above the local ground water table.

(3) Covered Roof.

When the roof of a drinking water storage tank will be covered by earth, the roof shall be sloped to drain toward the outside edge of the tank.

R309-545-9. Tank Roof and Sidewalls.**(1) Protection From Contamination.**

All drinking water storage tanks shall have suitable watertight roofs and sidewalls that shall also exclude birds, animals, insects, and excessive dust.

(2) Openings.

Openings in the roof and sidewalls shall be kept to a minimum and shall comply with the following:

(a) Any pipes running through the roof or sidewall of a metal drinking water storage tank shall be welded, or properly gasketed. In new concrete tanks, these pipes shall be connected to standard wall castings with seepage rings that have been poured in place. Vent pipes, in addition to seepage rings, shall have raised concrete curbs that direct water away from the vent pipe and are formed as a single pour with the roof deck. Roof drains or any other pipes, which may contain water of lesser quality than drinking water, shall not penetrate the roof, walls, or floor of a drinking water storage tank.

(b) Openings in a storage tank roof or top, designated to accommodate control apparatus or pump columns, shall be welded, gasketed, or curbed and sleeved as above, and shall have additional proper shielding to prevent vandalism.

(3) Adjacent Compartments.

Drinking water shall not be stored or conveyed in a compartment adjacent to wastewater when the two compartments are separated by a single wall.

(4) Roof Drainage.

The roof of all storage tanks shall be designed for drainage to eliminate water ponding. Parapets, or similar structures, which would tend to hold water and snow, shall not be allowed/permitted unless adequate waterproofing and drainage are provided. Downspout or roof drain pipes shall not enter or pass through the tank.

R309-545-10. Internal Features.

The following shall apply to internal features of drinking water storage tanks:

(1) Drains.

(a) A means shall be provided for the draining of drinking water storage tanks.

(b) Where possible, the drain shall be separate from the outlet pipeline. If a tank drain line is provided, it shall be sloped for complete drainage.

(c) The drain shall not discharge to a sanitary sewer.

(d) If local authority allows discharge to a storm drain, the drain discharge shall have a physical clearance of at least 12 inches between the discharge end of the pipe and the overflow rim of the receiving basin.

(2) Internal Catwalks.

Internal catwalks, if provided and located over the drinking water, shall have a solid floor with raised edges. The edges and floor shall be designed so that shoe scrapings or dirt will not fall into the drinking water.

(3) Inlet and Outlet.

(a) To minimize potential sediment in the flow from the tank, the outlet pipes from all tanks shall be located in a manner to provide a silt trap prior to discharge into the distribution system.

(b) Inlet and outlet pipes shall be configured to provide mixing and circulation.

(4) Tank Floor.

The floor of the storage tank shall be sloped to permit complete drainage of the structure.

R309-545-11. Internal Surfaces and Coatings.

(1) ANSI/NSF Standard 61 Certification.

All interior surfaces and coatings shall comply with ANSI/NSF Standard 61 or other standards approved by the Director. This requirement applies to any pipes and fittings, protective materials (e.g., paints, coatings, concrete admixtures, concrete release agents, or concrete sealers), joining and sealing materials (e.g., adhesives, caulks, gaskets, primers and sealants) and mechanical devices (e.g., electrical wire, switches, sensors, valves, or submersible pumps) that may come into contact with the drinking water.

(2) Curing Procedures and Volatile Organic Compounds.

(a) Proper curing procedures shall be followed per manufacturer's directions, including curing time, temperature, and forced air ventilation. Drinking water shall not be introduced into the tank until proper curing has occurred.

(b) It shall be the responsibility of the water system to assure that no tastes, odors, toxins, or contaminants that result in MCL exceedances, are imparted to the water as a result of tank coating or repair.

(c) Prior to placing a drinking water storage tank in service, cleaning, disinfection, and flushing procedures shall be completed.

(d) Prior to placing a drinking water storage tank in service, an analysis for volatile organic compounds from water contained therein may be required to verify compliance with drinking water maximum contaminant levels.

R309-545-12. Steel Tanks.

(1) Paints.

Proper protection shall be given to all metal surfaces, both internal and external, by paints or other protective coatings. Internal coatings shall comply with R309-545-11.

(2) Cathodic Protection.

If installed, internal cathodic protection shall be designed, installed and maintained by personnel trained in corrosion engineering.

R309-545-13. Tank Overflow.

All water storage tanks shall be provided with an overflow that discharges at an elevation between 12 and 24 inches above the ground surface or the rim of the receiving

basin. The discharge shall be directed away from the tank and shall not cause erosion.

(1) Diameter.

Overflow pipes shall be of sufficient capacity to permit waste of water in excess of the filling rate.

(2) Slope.

Overflow pipes shall be sloped for complete drainage.

(3) Screen.

Overflow pipes shall be screened with No. 4 mesh non-corrodible screen installed at a location least susceptible to damage by vandalism.

(4) Visible Discharge.

Overflow pipes shall be located so that any discharge is visible.

(5) Cross Connections.

Overflow pipes shall not be connected to, or discharge into, any sanitary sewer system.

R309-545-14. Access Openings.

Drinking water storage tanks shall be designed with reasonably convenient access to the interior for cleaning and maintenance.

(1) Height.

There shall be at least one opening above the level of the overflow, which shall be framed at least 4 inches above the surface of the roof at the opening; or if on a buried tank, shall be elevated at least 18 inches above any earthen cover over the tank. The frame shall be securely fastened and sealed to the tank roof to prevent any liquid contaminant entering the tank. Concrete drinking water storage tanks shall have raised curbs around access openings, formed and poured continuous with the pouring of the roof, and sloped to direct water away from the frame.

(2) Shoebox Lid.

The frame of any access opening shall be provided with a close-fitting, solid shoebox type cover that extends down around the frame at least 2 inches and is furnished with a gasket(s) between the lid and frame. The horizontal surface of the tank lid shall not have any openings, cracks, or penetrations, such as a lock, key hole, or bolted handle that would allow contaminants to enter the tank.

(3) Locking Device.

The lid to any access opening shall have a locking device.

R309-545-15. Venting.

Drinking water storage tanks shall be vented. The air venting capacity shall exceed the water inflow and the water outflow of the tank. Overflows shall not be considered or used as vents. Vents provided on drinking water storage tanks shall:

(1) Inverted Vent.

Be downturned a minimum of 2 inches below any opening and shielded to prevent the entrance of contaminants.

(2) Open Venting.

On buried structures, the end of the vent discharge shall be a minimum of 24 inches above the earthen covering.

(3) Blockage.

Be located and sized to avoid blockage during winter conditions.

(4) Screen.

Be fitted with No. 14 mesh or finer non-corrodible screen.

(5) Screen Protector.

Vents that are 6-inch diameter or greater shall be fitted with additional heavy gage screen or substantial covering, which will protect the No. 14 mesh screen against vandalism or damage.

R309-545-16. Freezing Prevention.

All drinking water storage tanks and their appurtenances, especially the riser pipes, overflows, and vents, shall be designed to prevent freezing which may interfere with proper functioning.

R309-545-17. Level Controls.

Adequate level control devices shall be provided to maintain water levels in storage tanks.

R309-545-18. Safety.**(1) Utah OSHA.**

The safety of employees shall be considered in the design of the storage tanks. Ladders, ladder guards, platform railings, and safely located entrance hatches shall be provided where applicable. As a minimum, safety practices shall conform to pertinent laws and regulations of the Utah Occupational Safety and Health Division.

(2) Ladders.

Ladders having an unbroken length in excess of 20 feet shall be provided with appropriate safety features, such as a safety cage, a safety harness, platforms, etc.

(3) Requirements for Elevated Tanks.

Elevated tanks shall have railings or handholds provided to access the water compartment safely.

R309-545-19. Disinfection.

Drinking water storage tanks shall be disinfected before being put into service for the first time and after being entered. The tank shall be cleaned of all refuse and shall then be washed with drinking water prior to adding the disinfectant. AWWA Standard C652-11 shall be followed for tank disinfection.

Upon completing any of the three methods for storage tank chlorination, as outlined in AWWA C652-11, the water system must properly dispose of residual super-chlorinated waters in the outlet pipes. Other super-chlorinated waters, which are not to be ultimately diluted and delivered into the distribution system, shall also be properly disposed. Chlorinated water discharged from the storage tank shall be disposed of in conformance with R317 of the Utah Administrative Code.

R309-545-20. Tank Standards.

The plans and specifications shall incorporate the applicable portions of the following standards:

(1) AWWA Standards.**(a) C652-11, Disinfection of Water-Storage Facilities.****(b) D100-11, Welded Carbon Steel Tanks for Water Storage.****(c) D102-11, Coating Steel Water-Storage Tanks.****(d) D103-09, Factory-Coated Bolted Carbon Steel Tanks for Water Storage.****(e) D104-11, Automatically Controlled, Impressed-Current Cathodic Protection for the Interior Submerged Surfaces of Steel Water Tanks.****(f) D110-13, Wire- and Strand-Wound, Circular, Prestressed Concrete Water Tanks.****(g) D115-06, Tendon-Prestressed Concrete Water Tanks.****(h) D120-09, Thermosetting Fiberglass-Reinforced Plastic Tanks.****(i) D130-11, Geomembrane Materials for Potable Water Applications.****(2) NSF International Standards.****(a) NSF 60, Drinking Water Treatment Chemicals - Health Effects.****(b) NSF 61, Drinking Water System Components - Health Effects.****(3) Utah OSHA.**

Applicable standards of the Utah Occupational Safety and Health Division shall be adhered to.

R309-545-21. Operation and Maintenance of Storage Tanks.**(1) Inspection and Cleaning.**

Tanks that are entered for inspection or cleaning shall be disinfected in accordance with AWWA Standard C652-11 prior to being returned to service.

(2) Recoating or Repairing.

Any substance used to recoat or repair the interior of a drinking water storage tank shall be certified to conform to ANSI/NSF Standard 61. If the tank is not drained for recoating or repairing, any substance or material used to repair the interior coatings or cracks shall be suitable for underwater application, as indicated by the manufacturer, as well as comply with both ANSI/NSF Standards 60 and 61. Recoating of the interior of a drinking water tank shall comply with the plan review requirements of R309-500-5(1)(c)(i).

(3) Seasonal Use.

Water storage tanks which are operated seasonally shall be flushed and disinfected in accordance with AWWA Standard C652-11 prior to each season's use. Certification of proper disinfection shall be obtained by the water system and kept on file. During the non-use period, care shall be taken to see that openings to the water storage tank (those which are normally closed and sealed during normal use) are closed and secured.

KEY: drinking water, storage tanks, access, overflow and drains**November 10, 2014****19-4-104****Notice of Continuation March 13, 2015**

R309. Environmental Quality, Drinking Water.
R309-550. Facility Design and Operation: Transmission and Distribution Pipelines.

R309-550-1. Purpose.

The purpose of this rule is to provide specific requirements for the design and installation of transmission and distribution pipelines which deliver drinking water to facilities of public drinking water systems or to consumers. It is intended to be applied in conjunction with rules R309-500 through R309-550. Collectively, these rules govern the design, construction, operation, and maintenance of public drinking water system facilities. These rules are intended to assure that facilities are reliably capable of supplying water in adequate quantities, consistently meeting applicable drinking water quality requirements, and not posing a threat to general public health.

R309-550-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(1)(a)(ii) of the Utah Code and in accordance with Title 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-550-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

R309-550-4. General.

Transmission and distribution pipelines shall be designed, constructed and operated to convey adequate quantities of water at ample pressure, while maintaining water quality.

R309-550-5. Water Main Design.

(1) Distribution System Pressure.

(a) The distribution system shall be designed to maintain minimum pressures as required in R309-105-9 at points of connection, under all conditions of flow.

(b) When static pressure exceeds 150 psi in new distribution water lines, pressure reducing devices shall be provided on mains in the distribution system where service connections exist.

(2) Design Flow Rates.

Flow rates used when designing or analyzing distribution systems shall meet the minimum requirements in R309-510.

(3) Hydraulic Analysis.

(a) All water mains shall be sized following a hydraulic analysis based on flow demands and pressure requirements.

(b) Where improvements will upgrade more than 50% of an existing distribution system, or where a new distribution system is proposed, a hydraulic analysis of the entire system shall be prepared and submitted for review prior to plan approval.

(c) Some projects require a hydraulic model. The Division may require submission of a hydraulic modeling report and/or certification, as outlined in R309-511, prior to plan approval.

(4) Minimum Water Main Size.

For water mains not connected to fire hydrants, the minimum line size shall be 4 inches in diameter, unless they serve picnic sites, parks, semi-developed camps, primitive camps, or roadway rest-stops. Minimum water main size, serving a fire hydrant lateral, shall be 8 inches in diameter unless a hydraulic analysis indicates that required flow and pressures can be maintained by 6-inch lines.

(5) Fire Protection.

When a public water system is required to provide water for fire flow by the local fire code official, or if the system has

installed fire hydrants on existing distribution mains for that purpose:

(a) The design of the distribution system shall be consistent with the fire flow requirements as determined by the local fire code official.

(b) The location of fire hydrants shall be consistent with the requirements of the State-adopted fire code and as determined by the local fire code official.

(c) The pipe network design shall permit fire flows to be met at representative locations while minimum pressures, as required in R309-105-9, are maintained at all times and at all points in the distribution system.

(d) Fire hydrant laterals shall be a minimum of 6 inches in diameter.

(6) Geologic Considerations.

The character of the soil through which water mains are to be laid shall be considered. Special design and burial techniques shall be employed for Community Water Systems in areas of geologic hazard (e.g., slide zones, fault zones, river crossings, etc.)

(7) Dead Ends.

(a) To provide increased reliability of service and reduce head loss, dead ends shall be minimized by making appropriate tie-ins whenever practical.

(b) Where dead-end mains occur, they shall be provided with a fire hydrant if flow and pressure are sufficient, or with an approved flushing hydrant or blow-off for flushing purposes. Flushing devices shall be sized to provide flows that will give a velocity of at least 2.5 fps in the water main being flushed. No flushing device shall be directly connected to a sewer.

(8) Isolation Valves.

Sufficient number of valves shall be provided on water mains so that inconvenience and sanitary hazards will be minimized during repairs. Valves shall be located at not more than 500 foot intervals in commercial districts and at not more than one block or 800 foot intervals in other districts. Where systems serve widely scattered customers and where future development is not expected, the valve spacing shall not exceed one mile.

(9) Corrosive Soils and Waters.

Consideration shall be given to the materials to be used when corrosive soils or waters will be encountered.

(10) Special Precautions in Areas of Contamination.

Where distribution systems are installed in areas of contamination:

(a) pipe and joint materials which are not susceptible to contamination, such as permeation by organic compounds, shall be used; and,

(b) non-permeable materials shall be used for all portions of the system including water mains, service connections, and hydrant leads.

(11) Water Mains and Other Sources of Contamination.

Caution shall be exercised when locating water mains at or near certain sites such as sewage treatment plants or industrial complexes. Individual septic tanks shall be located and avoided. The Division shall be contacted to establish specific design requirements prior to locating water mains near a source of contamination.

R309-550-6. Component Materials and Design.

(1) ANSI/NSF Standard for Health Effects.

All materials that may come in contact with drinking water, including pipes, gaskets, lubricants and O-Rings, shall be ANSI-certified as meeting the requirements of ANSI/NSF Standard 61, Drinking Water System Components - Health Effects. To permit field-verification of this certification, all components shall be appropriately stamped with the NSF logo.

(2) Asbestos and Lead.

(a) The use of asbestos cement pipe shall not be allowed.

(b) Pipes and pipe fittings installed after January 4, 2014, shall be "lead free" in accordance with Section 1417 of the Federal Safe Drinking Water Act. They shall be certified as meeting ANSI/NSF 372 or Annex G of ANSI/NSF 61.

(3) Standards for Mechanical Properties.

Pipe, joints, fittings, valves, and fire hydrants shall conform to ANSI/NSF Standard 61, and applicable sections of AWWA Standards C104-A21.4-08 through C550-05 and C900-07 through C950-07.

(4) Used Materials.

Only materials that have been used previously for conveying drinking water may be reused. Used materials shall meet the above standards, be thoroughly cleaned, and be restored to their original condition.

(5) Fire Hydrants.

(a) Hydrant drains shall not be connected to, or located within, 10 feet of sanitary sewers. Where possible, hydrant drains shall not be located within 10 feet of storm drains.

(b) Auxiliary valves shall be installed in all hydrant leads.

(c) Hydrant drains shall be installed with a gravel packet or dry well unless the natural soils will provide adequate drainage.

(6) Air Relief Valves and Blow-Offs.

(a) At high points in water mains where air can accumulate, provisions shall be made to remove air by means of hydrants or air relief valves.

(b) The open end of the air relief vent pipe from automatic valves shall be provided with a #14 mesh, non-corrodible screen and a downward elbow, and where possible, be extended to at least one foot above grade. Alternatively, the open end of the pipe may be extended to as little as one foot above the top of the pipe if the valve's chamber is not subject to flooding, or if it meets the requirements of (7) Chamber Drainage.

(c) Blow-offs or air relief valves shall not be connected directly to a sewer.

(d) Adequate number of hydrants or blow-offs shall be provided to allow periodic flushing and cleaning of water lines.

(e) The air relief valve shall be installed in a manner to prevent it from freezing. A shut-off valve shall be provided to permit servicing of an air relief valve.

(7) Chamber Drainage.

(a) Chambers, pits, or manholes containing valves, blow-offs, meters, or other such appurtenances to a distribution system, shall not be connected directly to a storm drain or sanitary sewer.

(b) Chambers shall be provided with a drain to daylight, if possible. Where this is not possible, underground gravel-filled absorption pits may be used if the site is not subject to flooding and conditions will assure adequate drainage. Sump pumps may also be considered if a drain to daylight or absorption pit is not feasible.

(8) Control Valve Stations

(a) Pressure Reducing Valves (PRVs)

(i) Isolation Valves shall be installed on both sides of the pressure reducing valve.

(ii) Where variable flow conditions will be encountered, consideration shall be given to providing parallel PRV lines to accommodate low and high flow conditions.

(b) Backflow Devices

Installation of Backflow devices shall conform to the State-adopted plumbing code.

(c) Meters

Meter installation shall conform to the State-adopted

plumbing code and local jurisdictional standards.

R309-550-7. Separation of Water Mains and Transmission Lines from Sewers.

(1) Basic Separation Standards.

(a) The horizontal distance between water lines and sanitary sewer lines shall be at least 10 feet. Where a water main and a sewer line must cross, the water main shall be at least 18 inches above the sewer line. Separation distances shall be measured edge-to-edge (i.e. from the nearest edges of the facilities).

(b) Water mains and sewer lines shall not be installed in the same trench.

(c) Where local conditions make it impossible to install water or sewer lines at separation distances required by subsection (a), the sewer pipes are in good condition, and there is not high groundwater in the area, it may be acceptable if the design includes a minimum horizontal separation of 6 feet and a minimum vertical clearance of 18 inches with the waterline being above. In order to determine whether the design is acceptable, the following information shall be submitted as part of the plans for review.

(i) reason for not meeting the minimum separation standard;

(ii) location where the water and sewer line separation is not being met;

(iii) horizontal and vertical clearance that will be achieved;

(iv) sewer line information including pipe material, condition, size, age, type of joints, thickness or pressure class, whether the pipe is pressurized or not, etc.;

(v) water line information including pipe material, condition, size, age, type of joints, thickness or pressure class, etc.;

(vi) ground water and soil conditions; and,

(vii) any mitigation efforts.

(d) If the basic separation standards as outlined in subsections (a) through (c) above cannot be met, an exception to the rule can be applied for with additional mitigation measures to protect public health, in accordance with R309-105-6(2)(b).

(3) Special Provisions.

The following special provisions apply to all situations:

(a) The basic separation standards are applicable under normal conditions for sewage collection lines and water distribution mains. More stringent requirements may be necessary if conditions such as high groundwater exist.

(b) All water transmission lines that may become unpressurized shall not be installed within 20 feet of sewer lines.

(c) In the installation of water mains or sewer lines, measures shall be taken to prevent or minimize disturbances of the existing line.

(d) Special consideration shall be given to the selection of pipe materials if corrosive conditions are likely to exist or where the minimum separation distances cannot be met. These conditions may be due to soil type, groundwater, and/or the nature of the fluid conveyed in the conduit, such as a septic sewage which produces corrosive hydrogen sulfide.

(e) Sewer Force Mains

(i) When a new sewer force main crosses under an existing water main, all portions of the sewer force main within 10 feet (horizontally) of the water main shall be enclosed in a continuous sleeve.

(ii) When a new water main crosses over an existing sewer force main, the water main shall be constructed of pipe materials with a minimum rated working pressure of 200 psi or equivalent pressure rating.

(4) Water Service Laterals Crossing Sewer Mains and

Laterals.

Water service laterals shall conform to all requirements given herein for the separation of water and sewer lines.

R309-550-8. Installation of Water Mains.

(1) Standards.

The specifications shall incorporate the provisions of the manufacturer's recommended installation procedures or the following applicable standards:

(a) For ductile iron pipe, AWWA Standard C600-10, Installation of Ductile Iron Water Mains and Their Appurtenances;

(b) For PVC pipe, ASTM D2774, Recommended Practice for Underground Installation of Thermoplastic Pressure Piping and PVC Pipe and AWWA Manual of Practice M23, 2003;

(c) For HDPE pipe, ASTM D2774, Recommended Practice for Underground Installation of Thermoplastic Pressure Piping and AWWA Manual of Practice M55, 2006; and,

(d) For Steel pipe, AWWA Standard C604-11, Installation of Buried Steel Water Pipe- 4 inch and Larger.

(2) Bedding.

A continuous and uniform bedding shall be provided in the trench for all buried pipe. Stones larger than the backfill materials described below shall be removed for a depth of at least 6 inches below the bottom of the pipe.

(3) Backfill.

Backfill material shall be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. The material and backfill zones shall be as specified by the standards referenced in Subsection (1), above. As a minimum:

(a) for plastic pipe, backfill material with a maximum particle size of 3/4 inch shall be used to surround the pipe; and,

(b) for ductile iron pipe, backfill material shall contain no stones larger than 2 inches.

(4) Dropping Pipe into Trench.

Under no circumstances shall the pipe or accessories be dropped into the trench.

(5) Burial Cover.

All water mains shall be covered with sufficient earth or other insulation to prevent freezing, unless they are part of a non-community system that can be shut-down and drained during winter months when temperatures are below freezing.

(6) Thrust Blocking.

All tees, bends, plugs, and hydrants shall be provided with thrust blocking, anchoring, tie rods, or restraint joints designed to prevent movement. Restraints shall be sized to withstand the forces experienced.

(7) Pressure and Leakage Testing.

All types of installed pipe shall be pressure tested and leakage tested in accordance with AWWA Standard C600-10.

(8) Surface Water Crossings.

(a) Above Water Crossings

The pipe shall be adequately supported and anchored, protected from damage and freezing, and accessible for repair or replacement.

(b) Underwater Crossings

(i) A minimum cover of 2 feet or greater, as local conditions may dictate, shall be provided over the pipe.

(ii) When crossing water courses that are greater than 15 feet in width, the following shall be provided:

(A) Pipe with joints shall be of special construction, having restrained joints for joints within the surface water course and flexible restrained joints at both edges of the water course.

(B) Isolating valves shall be provided on both sides of

the water crossing at locations not subject to high ground water or flooding, so that the section can be isolated for testing or repair.

(C) A means shall be provided, such as a sampling tap, not subject to flooding, to allow for representative water quality testing on the upstream and downstream side of the crossing.

(D) A means shall be provided to pressure test the underground water crossing pipe.

(9) Sealing Pipe Ends During Construction.

The open ends of all pipelines under construction shall be covered and effectively sealed at the end of the day's work.

(10) Disinfecting Water Lines.

All new water mains or appurtenances shall be disinfected in accordance with AWWA Standard C651-05 or a method approved by the Director. The specifications shall include detailed procedures for the adequate flushing, disinfection and microbiological testing of all water mains. On all new and extensive distribution system construction, evidence of satisfactory disinfection shall be provided to the Division. Samples for coliform analyses shall be collected after disinfection is complete and the system is refilled with drinking water. A standard heterotrophic plate count is advisable. The use of water for public drinking water purposes shall not commence until the bacteriologic tests indicate the water is free from contamination.

R309-550-9. Cross Connections and Interconnections.

(1) Physical Cross Connections.

There shall be no physical cross connections between the distribution system and pipe, pumps, hydrants, or tanks that may be contaminated from any source, including pressurized irrigation.

(2) Recycled Water.

Neither steam condensate nor cooling water from engine jackets or other heat exchange devices shall be returned to the drinking water supply.

(3) System Interconnects.

The interconnections between different drinking water systems shall be reviewed and approved by the Director.

R309-550-10. Water Hauling.

(1) Community Water Systems.

Water hauling is not an acceptable permanent source for drinking water distribution in Community Water Systems.

(2) Non-Community Systems.

The Director may allow water hauling for Non-Community Public Water Systems by special approval if:

(a) consumers can not otherwise be supplied with good quality drinking water; or,

(b) the nature of the development, or ground conditions, are such that the placement of a pipe distribution system is not justified.

Proposals for water hauling shall be submitted to, and approved by, the Director.

(3) Emergencies.

Water hauling may be a temporary means of providing drinking water in an emergency. Water systems shall notify the Division as soon as possible of such emergencies.

R309-550-11. Service Connections and Plumbing.

(1) Service Taps.

Service taps shall not jeopardize the quality of the system's water.

(2) Plumbing.

(a) Water services and plumbing shall conform to the State-adopted Plumbing Code.

(b) Pipes and pipe fittings installed after January 4, 2014, shall be "lead-free" in accordance with Section 1417 of

the federal Safe Drinking Water Act. They shall be certified meeting the ANSI/NSF 372 or Annex G of ANSI/NSF 61.

(3) Individual Home Booster Pumps.

Individual booster pumps shall not be allowed for individual service from the public water supply mains. Exceptions to the rule may be granted by the Director if it can be shown that the granting of such an exception will not jeopardize the public health.

(4) Service Lines.

(a) Service lines shall be capped until connected for service.

(b) The portion of the service line under the control of the water system is considered to be part of the distribution system.

(5) Service Meters and Building Service Line.

Connections between the service meter and the home shall be in accordance with the State-adopted Plumbing Code.

R309-550-12. Transmission Lines.

(1) Unpressurized Flows.

Transmission lines shall conform to all applicable requirements in this rule. Transmission line design shall minimize unpressurized flows.

(2) Proximity to Concentrated Sources of Pollution.

A water system shall not install an unpressurized transmission line less than 20 feet from a concentrated source of pollution (e.g., septic tanks and drain fields, garbage dumps, pit privies, sewer lines, feed lots, etc.). Furthermore, unpressurized transmission lines shall not be placed in boggy areas or areas subject to the ponding of water.

R309-550-13. Operation and Maintenance.

(1) Disinfection After Line Repair.

The disinfection procedures of Section 4.7, AWWA Standard C651-05 shall be followed if a water main is cut or repaired.

(2) Cross Connections.

The water system shall not allow a connection that may jeopardize water quality. Cross connections shall be eliminated by physical separation, an air gap, or an approved and properly operating backflow prevention assembly.

The water system shall have an ongoing cross connection control program in compliance with R309-105-12.

(3) ANSI/NSF Standards.

All pipe and fittings used in routine operation and maintenance shall be ANSI-certified as meeting NSF Standard 61 or Standard 14.

(4) Seasonal Operation.

Water systems operated seasonally shall be disinfected and flushed according to AWWA Standard C651-05 for pipelines and AWWA Standard C652-11 for storage facilities prior to each season's use. A satisfactory bacteriologic sample shall be obtained prior to use. During the non-use period, care shall be taken to close all openings into the system.

KEY: drinking water, transmission and distribution pipelines, connections, water hauling

November 10, 2014

19-4-104

Notice of Continuation March 13, 2015

R309. Environmental Quality, Drinking Water.
R309-600. Source Protection: Drinking Water Source Protection For Ground-Water Sources.

R309-600-1. Authority.

Under authority of Section 19-4-104(1)(a)(iv), the Drinking Water Board adopts this rule which governs the protection of ground-water sources of drinking water.

R309-600-2. Purpose.

Public Water Systems (PWSs) are responsible for protecting their sources of drinking water from contamination. R309-600 sets forth minimum requirements to establish a uniform, statewide program for implementation by PWSs to protect their ground-water sources of drinking water. PWSs are encouraged to enact more stringent programs to protect their sources of drinking water if they decide they are necessary.

R309-600 applies to ground-water sources and to ground-water sources which are under the direct influence of surface water which are used by PWSs to supply their systems with drinking water. However, compliance with this rule is voluntary for existing ground-water sources of drinking water which are used by public (transient) non-community water systems.

R309-600-3. Implementation.

(1) New Ground-Water Sources - Each PWS shall submit a Preliminary Evaluation Report (PER) in accordance with R309-600-13(2) for each of its new ground-water sources to the Division of Drinking Water (DDW). A PWS shall not begin construction of a new source until the Director concurs with its PER.

(2) Existing Ground-Water Sources - Each PWS shall submit a Drinking Water Source Protection (DWSP) Plan in accordance with R309-600-7(1) for each of its existing ground-water sources to DDW according to the following schedule. Well fields or groups of springs may be considered to be a single source.

TABLE 1

Population Served By PWS:	Percent Of Sources:	DWSP Plans Due By:
Over 10,000	50% of wells	December 31, 1995
Over 10,000	100% of wells	December 31, 1996
3,300-10,000	100% of wells	December 31, 1997
Less than 3,300	100% of wells	December 31, 1998
Springs and other sources	100%	December 31, 1999

(3) DWSP for existing ground-water sources under the direct influence of surface water shall be accomplished through delineation of both the ground water and surface water contribution areas. The requirements of R309-600-7(1) apply to the ground water portion and the requirements of R309-605 apply to the surface water portion, except that the schedule for submitting these DWSP plans to DDW is based on the schedule in R309-605-3(1).

(4) PWSs shall maintain all land use agreements which were established under previous rules to protect their ground-water sources of drinking water from contamination.

R309-600-4. Exceptions.

(1) Exceptions to the requirements of R309-600 or parts thereof may be granted by the Director to PWSs if: due to compelling factors (which may include economic factors), a PWS is unable to comply with these requirements, and the granting of an exception will not result in an unreasonable risk to health.

(2) The Director may prescribe a schedule by which the PWS must come into compliance with the requirements of

R309-600.

R309-600-5. Designated Person.

(1) A designated person shall be appointed and reported in writing to the Director by each PWS within 180 days of the effective date of R309-600. The designated person's address and telephone number shall be included in the written correspondence. Additionally, the above information must be included in each DWSP Plan and PER that is submitted to DDW.

(2) Each PWS shall notify the Director in writing within 30 days of any changes in the appointment of a designated person.

R309-600-6. Definitions.

(1) The following terms are defined for the purposes of this rule:

(a) "Collection area" means the area surrounding a ground-water source which is underlain by collection pipes, tile, tunnels, infiltration boxes, or other ground-water collection devices.

(b) "Controls" means the codes, ordinances, rules, and regulations currently in effect to regulate a potential contamination source. "Controls" also means physical controls which may prevent contaminants from migrating off of a site and into surface or ground water. "Controls" also means negligible quantities of contaminants.

(c) "Criteria" means the conceptual standards that form the basis for DWSP area delineation to include distance, ground-water time of travel, aquifer boundaries, and ground-water divides.

(d) "Criteria threshold" means a value or set of values selected to represent the limits above or below which a given criterion will cease to provide the desired degree of protection.

(e) "DDW" means Division of Drinking Water.

(f) "DWSP Program" means the program to protect drinking water source protection zones and management areas from contaminants that may have an adverse effect on the health of persons.

(g) "DWSP Zone" means the surface and subsurface area surrounding a ground-water source of drinking water supplying a PWS, through which contaminants are reasonably likely to move toward and reach such ground-water source.

(h) "Designated person" means the person appointed by a PWS to ensure that the requirements of R309-600 are met.

(i) "Director" means the Director of the Division of Drinking Water.

(j) "Engineer" means a person licensed under the Professional Engineers and Land Surveyors Licensing Act, 58-22 of the Utah Code, as a "professional engineer" as defined therein.

(k) "Existing ground-water source of drinking water" means a public supply ground-water source for which plans and specifications were submitted to DDW on or before July 26, 1993.

(l) "Geologist" means a person licensed under the Professional Geologist Licensing Act, 58-76 of the Utah Code, as a "professional geologist" as defined therein.

(m) "Ground-water Source" means any well, spring, tunnel, adit, or other underground opening from or through which ground-water flows or is pumped from subsurface water-bearing formations.

(n) "Hydrogeologic methods" means the techniques used to translate selected criteria and criteria thresholds into mappable delineation boundaries. These methods include, but are not limited to, arbitrary fixed radii, analytical calculations and models, hydrogeologic mapping, and numerical flow models.

(o) "Land management strategies" means zoning and non-zoning strategies which include, but are not limited to, the following: zoning and subdivision ordinances, site plan reviews, design and operating standards, source prohibitions, purchase of property and development rights, public education programs, ground-water monitoring, household hazardous waste collection programs, water conservation programs, memoranda of understanding, written contracts and agreements, and so forth.

(p) "Land use agreement" means a written agreement wherein the owner(s) agrees not to locate or allow the location of uncontrolled potential contamination sources or pollution sources within zone one of new wells in protected aquifers. The owner(s) must also agree not to locate or allow the location of pollution sources within zone two of new wells in unprotected aquifers and new springs unless the pollution source agrees to install design standards which prevent contaminated discharges to ground water. This restriction must be binding on all heirs, successors, and assigns. Land use agreements must be recorded with the property description in the local county recorder's office. Refer to R309-600-13(2)(d).

Land use agreements for protection areas on publicly owned lands need not be recorded in the local county recorder office. However, a letter must be obtained from the Administrator of the land in question and meet the requirements described above.

(q) "Management area" means the area outside of zone one and within a two-mile radius where the Optional Two-mile Radius Delineation Procedure has been used to identify a protection area.

For wells, land may be excluded from the DWSP management area at locations where it is more than 100 feet lower in elevation than the total drilled depth of the well.

For springs and tunnels, the DWSP management area is all land at elevation equal to or higher than, and within a two-mile radius, of the spring or tunnel collection area. The DWSP management area also includes all land lower in elevation than, and within 100 horizontal feet, of the spring or tunnel collection area. The elevation datum to be used is the point of water collection. Land may also be excluded from the DWSP management area at locations where it is separated from the ground-water source by a surface drainage which is lower in elevation than the spring or tunnel collection area.

(r) "New ground-water source of drinking water" means a public supply ground-water source of drinking water for which plans and specifications are submitted to DDW after July 26, 1993.

(s) "Nonpoint source" means any diffuse source of pollutants or contaminants not otherwise defined as a point source.

(t) "PWS" means public water system.

(u) "Point source" means any discernible, confined, and discrete source of pollutants or contaminants, including but not limited to any site, pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, animal feeding operation with more than ten animal units, landfill, or vessel or other floating craft, from which pollutants are or may be discharged.

(v) "Pollution source" means point source discharges of contaminants to ground water or potential discharges of the liquid forms of "extremely hazardous substances" which are stored in containers in excess of "applicable threshold planning quantities" as specified in SARA Title III. Examples of possible pollution sources include, but are not limited to, the following: storage facilities that store the liquid forms of extremely hazardous substances, septic tanks, drain fields, class V underground injection wells, landfills, open dumps, landfilling of sludge and septage, manure piles, salt piles, pit

privies, drain lines, and animal feeding operations with more than ten animal units.

The following definitions are part of R309-600 and clarify the meaning of "pollution source:"

(i) "Animal feeding operation" means a lot or facility where the following conditions are met: animals have been or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period, and crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. Two or more animal feeding operations under common ownership are considered to be a single feeding operation if they adjoin each other, if they use a common area, or if they use a common system for the disposal of wastes.

(ii) "Animal unit" means a unit of measurement for any animal feeding operation calculated by adding the following numbers; the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 55 pounds multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

(iii) "Extremely hazardous substances" means those substances which are identified in the Sec. 302(EHS) column of the "Title III List of Lists: Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112(R) of the Clean Air Act, As Amended," (550B98017). A copy of this document may be obtained from: NCEPI, PO Box 42419, Cincinnati, OH 45202. Online ordering is also available at <http://www.epa.gov/ncepihom/orderpub.html>.

(w) "Potential contamination source" means any facility or site which employs an activity or procedure which may potentially contaminate ground water. A pollution source is also a potential contamination source.

(x) "Protected aquifer" means a producing aquifer in which the following conditions are met:

(i) A naturally protective layer of clay, at least 30 feet in thickness, is present above the aquifer;

(ii) the PWS provides data to indicate the lateral continuity of the clay layer to the extent of zone two; and

(iii) the public-supply well is grouted with a grout seal that extends from the ground surface down to at least 100 feet below the surface, and for a thickness of at least 30 feet through the protective clay layer.

(y) "Replacement well" means a public-supply well drilled for the sole purpose of replacing an existing public-supply well which is impaired or made useless by structural difficulties and in which the following conditions are met:

(i) the proposed well location shall be within a radius of 150 feet from an existing ground-water supply well, as defined in R309-600-6(1)(k); and

(ii) the PWS provides a copy of the replacement application approved by the State Engineer (refer to Section 73-3-28 of the Utah Code Annotated).

(z) "Time of travel" means the time required for a particle of water to move in the producing aquifer from a specific point to a ground-water source of drinking water.

(aa) "Unprotected aquifer" means any aquifer that does not meet the definition of a protected aquifer.

(bb) "Wellhead" means the physical structure, facility, or device at the land surface from or through which ground-water flows or is pumped from subsurface, water-bearing formations.

R309-600-7. DWSP Plans.

(1) Each PWS shall develop, submit, and implement a DWSP Plan for each of its ground-water sources of drinking water.

Required Sections for DWSP Plans - DWSP Plans should be developed in accordance with the "Standard Report Format for Existing Wells and Springs." This document may be obtained from DDW. DWSP Plans must include the following seven sections:

(a) DWSP Delineation Report - A DWSP Delineation Report in accordance with R309-600-9(6) is the first section of a DWSP Plan.

(b) Potential Contamination Source Inventory and Assessment of Controls - A Prioritized Inventory of Potential Contamination Sources and an assessment of their controls in accordance with R309-600-10 is the second section of a DWSP Plan.

(c) Management Program to Control Each Preexisting Potential Contamination Source - A Management Program to Control Each Preexisting Potential Contamination Source in accordance with R309-600-11 is the third section of a DWSP Plan.

(d) Management Program to Control or Prohibit Future Potential Contamination Sources - A Plan for Controlling or Prohibiting Future Potential Contamination Sources is the fourth section of a DWSP Plan. This must be in accordance with R309-600-12, consistent with the general provisions of this rule, and implemented to an extent allowed under the PWS's authority and jurisdiction.

(e) Implementation Schedule - Each PWS shall develop a step-by-step implementation schedule which lists each of its proposed land management strategies with an implementation date for each strategy.

(f) Resource Evaluation - Each PWS shall assess the financial and other resources which may be required for it to implement each of its DWSP Plans and determine how these resources may be acquired.

(g) Recordkeeping - Each PWS shall document changes in each of its DWSP Plans as they are continuously updated to show current conditions in the protection zones and management areas. As a DWSP Plan is executed, the PWS shall document any land management strategies that are implemented. These documents may include any of the following: ordinances, codes, permits, memoranda of understanding, public education programs, public notifications, and so forth.

(2) DWSP Plan Administration - DWSP Plans shall be submitted, corrected, retained, implemented, updated, and revised according to the following:

(a) Submitting DWSP Plans - Each PWS shall submit a DWSP Plan to DDW in accordance with the schedule in R309-600-3 for each of its ground-water sources of drinking water.

(b) Correcting Deficiencies - Each PWS shall correct any deficiencies in a disapproved DWSP Plan and resubmit it to DDW within 90 days of the disapproval date.

(c) Retaining DWSP Plans - Each PWS shall retain on its premises a current copy of each of its DWSP Plans.

(d) Implementing DWSP Plans - Each PWS shall begin implementing each of its DWSP Plans in accordance with its schedule in R309-600-7(1)(e), within 180 days after submittal if they are not disapproved by the Director.

(e) Updating and Resubmitting DWSP Plans - Each PWS shall update its DWSP Plans as often as necessary to ensure they show current conditions in the DWSP zones and management areas. Updated plans also document the implementation of land management strategies in the recordkeeping section. Actual copies of any ordinances, codes, permits, memoranda of understanding, public education programs, bill stuffers, newsletters, training session agendas, minutes of meetings, memoranda for file, etc. must be submitted with the recordkeeping section of updated plans. DWSP Plans are initially due according to the schedule in

R309-600-3. Thereafter, updated DWSP Plans are due every six years from their original due date. This applies even though a PWS may have been granted an extension beyond the original due date.

(f) Revising DWSP Plans - Each PWS shall submit a revised DWSP Plan to DDW within 180 days after the reconstruction or redevelopment of any ground-water source of drinking water which addresses changes in source construction, source development, hydrogeology, delineation, potential contamination sources, and proposed land management strategies.

R309-600-8. DWSP Plan Review.

(1) The Director shall review each DWSP Plan submitted by PWSs and "concur," "concur with recommendations," "conditionally concur" or "disapprove" the plan.

(2) The Director may "disapprove" DWSP Plans for any of the following reasons:

(a) An inaccurate DWSP Delineation Report, a report that uses a non-applicable delineation method, or a DWSP Plan that is missing this report or any of the information and data required in it (refer to R309-600-9(6));

(b) an inaccurate Prioritized Inventory of Potential Contamination Sources or a DWSP Plan that is missing this report or any of the information required in it (refer to R309-600-10(1));

(c) an inaccurate assessment of current controls (refer to R309-600-10(2));

(d) a missing Management Program to Control Each Preexisting Potential Contamination Source which has been assessed as "not adequately controlled" by the PWS (refer to R309-600-11(1));

(e) a missing Management Program to Control or Prohibit Future Potential Contamination Sources (refer to R309-600-12);

(f) a missing or incomplete Implementation Schedule, Resource Evaluation, Recordkeeping Section, Contingency Plan, or Public Notification Plan (refer to R309-600-7(1)(e)-(g), R309-600-14, and R309-600-15).

(3) The Director may "concur with recommendations" when PWSs propose management programs to control preexisting potential contamination sources or management programs to control or prohibit future potential contamination sources for existing or new drinking water sources which appear inadequate or ineffective.

(4) The Director may "conditionally concur" with a DWSP Plan or PER. The PWS must implement the conditions and report compliance the next time the DWSP Plan is due and submitted to DDW.

R309-600-9. Delineation of Protection Zones and Management Areas.

(1) PWSs shall delineate protection zones or a management area around each of their ground-water sources of drinking water using the Preferred Delineation Procedure or the Optional Two-mile Radius Delineation Procedure. The hydrogeologic method used by PWSs shall produce protection zones or a management area in accordance with the criteria thresholds below. PWSs may also choose to verify protected aquifer conditions to reduce the level of management controls applied in applicable protection areas.

(2) Reports must be prepared by a qualified licensed professional - A submitted report which addresses any of the following sections shall be stamped and signed by a professional geologist or professional engineer:

(a) A Delineation Report for Estimated DWSP Zones produced using the Preferred Delineation Procedure, as explained in R309-600-13(2)(a);

(b) a DWSP Delineation Report produced using the Preferred Delineation Procedure, as explained in R309-600-9(3)(a) and (6)(a);

(c) a report to verify protected aquifer conditions, as explained in R309-600-9(4) and (7);

(d) a report which addresses special conditions, as explained in R309-600-9(5); or

(e) a Hydrogeologic Report to Exclude a Potential Contamination Source, as explained in R309-600-9(6)(b)(ii).

(3) Criteria Thresholds for Ground-water Sources of Drinking Water:

(a) Preferred Delineation Procedure - Four zones are delineated for management purposes:

(i) Zone one is the area within a 100-foot radius from the wellhead or margin of the collection area.

(ii) Zone two is the area within a 250-day ground-water time of travel to the wellhead or margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground-water source, or the ground-water divide, whichever is closer. If the available data indicate a zone of increased ground-water velocity within the producing aquifer(s), then time-of-travel calculations shall be based on this data.

(iii) Zone three (waiver criteria zone) is the area within a 3-year ground-water time of travel to the wellhead or margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground-water source, or the ground-water divide, whichever is closer. If the available data indicate a zone of increased ground-water velocity within the producing aquifer(s), then time-of-travel calculations shall be based on this data.

(iv) Zone four is the area within a 15-year ground-water time of travel to the wellhead or margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground-water source, or the ground-water divide, whichever is closer. If the available data indicate a zone of increased ground-water velocity within the producing aquifer(s), then time-of-travel calculation shall be based on this data.

(b) Optional Two-mile Radius Delineation Procedure - In place of the Preferred Delineation Procedure, PWSs may choose to use the Optional Two-mile Radius Delineation Procedure to delineate a management area. This procedure is best applied in remote areas where few if any potential contamination sources are located. Refer to R309-600-6(1)(q) for the definition of a management area.

(4) Protected Aquifer Classification - PWSs may choose to verify protected aquifer conditions to reduce the level of management controls for a public-supply well which produces water from a protected aquifer(s) or to meet one of the requirements of a VOC or pesticide susceptibility waiver (R309-600-16(4)). Refer to R309-600-6(1)(x) for the definition of a "protected aquifer."

(5) Special Conditions - Special scientific or engineering studies may be conducted to support a request for an exception (refer to R309-600-4) due to special conditions. These studies must be approved by the Director before the PWS begins the study. Special studies may include confined aquifer conditions, ground-water movement through protective layers, wastewater transport and fate, etc.

(6) DWSP Delineation Report - Each PWS shall submit a DWSP Delineation Report to DDW for each of its ground-water sources using the Preferred Delineation Procedure or the Optional Two-mile Radius Delineation Procedure.

(a) Preferred Delineation Procedure - Delineation reports for protection zones delineated using the Preferred Delineation Procedure shall include the following information and a list of all sources or references for this information:

(i) Geologic Data - A brief description of geologic features and aquifer characteristics observed in the well and area of the potential protection zones. This should include the

formal or informal stratigraphic name(s), lithology of the aquifer(s) and confining unit(s), and description of fractures and solution cavities (size, abundance, spacing, orientation) and faults (brief description of location in or near the well, and orientation). Lithologic descriptions can be obtained from surface hand samples or well cuttings; core samples and laboratory analyses are not necessary. Fractures, solution cavities, and faults may be described from surface outcrops or drill logs.

(ii) Well Construction Data - If the source is a well, the report shall include the well drillers log, elevation of the wellhead, borehole radius, casing radius, total depth of the well, depth and length of the screened or perforated interval(s), well screen or perforation type, casing type, method of well construction, type of pump, location of pump in the well, and the maximum projected pumping rate of the well. The maximum pumping rate of the well must be used in the delineation calculations. Averaged pumping rate values shall not be used.

(iii) Spring Construction Data - If the source is a spring or tunnel the report shall include a description or diagram of the collection area and method of ground-water collection.

(iv) Aquifer Data for New Wells - A summary report including the calculated hydraulic conductivity of the aquifer, transmissivity, hydraulic gradient, direction of ground-water flow, estimated effective porosity, and saturated thickness of the producing aquifer(s). The PWS shall obtain the hydraulic conductivity of the aquifer from a constant-rate aquifer test and provide the data as described in R309-515-6(10)(b). Estimated effective porosity must be between 1% and 30%. Clay layers shall not be included in calculations of aquifer thickness or estimated effective porosity. This report shall include graphs, data, or printouts showing the interpretation of the aquifer test.

(v) Aquifer Data for Existing Wells - A summary report including the calculated hydraulic conductivity of the aquifer, transmissivity, hydraulic gradient, direction of ground-water flow, estimated effective porosity, and saturated thickness of the producing aquifer(s). The PWS shall obtain the hydraulic conductivity of the aquifer from a constant-rate aquifer test using the existing pumping equipment. Aquifer tests using observation wells are encouraged, but are not required. If a previously performed aquifer test is available and includes the required data described below, data from that test may be used instead. Estimated effective porosity must be between 1% and 30%. Clay layers shall not be included in calculations of aquifer thickness or estimated effective porosity. This report shall include graphs, data, or printouts showing the interpretation of the aquifer test.

If a constant-rate aquifer test is not practical, then the PWS shall obtain hydraulic conductivity of the aquifer using another appropriate method, such as data from a nearby well in the same aquifer, specific capacity of the well, published hydrogeologic studies of the same aquifer, or local or regional ground-water models. A constant-rate test may not be practical for such reasons as insufficient drawdown in the well, inaccessibility of the well for water-level measurements, or insufficient overflow capacity for the pumped water.

The constant-rate test shall:

(A) Provide for continuous pumping for at least 24 hours or until stabilized drawdown has continued for at least six hours. Stabilized drawdown is achieved when there is less than one foot of change of ground-water level in the well within a six-hour period.

(B) Provide data as described in R309-515-6(10)(b)(v) through (vii).

(vi) Additional Data for Observation Wells - If the aquifer test is conducted using observation wells, the report shall include the following information for each observation

well: location and surface elevation; total depth; depth and length of the screened or perforated intervals; radius, casing type, screen or perforation type, and method of construction; prepumping ground-water level; the time-drawdown or distance-drawdown data and curve; and the total drawdown.

(vii) Hydrogeologic Methods and Calculations - These include the ground-water model or other hydrogeologic method used to delineate the protection zones, all applicable equations, values, and the calculations which determine the delineated boundaries of zones two, three, and four. The hydrogeologic method or ground-water model must be reasonably applicable for the aquifer setting. For wells, the hydrogeologic method or ground-water model must include the effects of drawdown (increased hydraulic gradient near the well) and interference from other wells.

(viii) Map Showing Boundaries of the DWSP Zones - A map showing the location of the ground-water source of drinking water and the boundary for each DWSP zone. The base map shall be a 1:24,000-scale (7.5-minute series) topographic map, such as is published by the U.S. Geological Survey. Although zone one (100-foot radius around the well or margin of the collection area) need not be on the map, the complete boundaries for zones two, three, and four must be drawn and labeled. More detailed maps are optional and may be submitted in addition to the map required above.

The PWS shall also include a written description of the distances which define the delineated boundaries of zones two, three, and four. These written descriptions must include the maximum distances upgradient from the well, the maximum distances downgradient from the well, and the maximum widths of each protection zone.

(b) Optional Two-Mile Radius Delineation Procedure - Delineation Reports for protection areas delineated using the Optional Two-mile Radius Delineation Procedure shall include the following information:

(i) Map Showing Boundaries of the DWSP Management Area - A map showing the location of the ground-water source of drinking water and the DWSP management area boundary. The base map shall be a 1:24,000-scale (7.5-minute series) topographic map, such as is published by the U.S. Geological Survey. Although zone one (100-foot radius around the well or margin of the collection area) need not be on the map, the complete two-mile radius must be drawn and labeled. More detailed maps are optional and may be submitted in addition to the map required above.

(ii) Hydrogeologic Report to Exclude a Potential Contamination Source - To exclude a potential contamination source from the inventory which is required in R309-600-10(1), a hydrogeologic report is required which clearly demonstrates that the potential contamination source has no capacity to contaminate the source.

(7) Protected Aquifer Conditions - If a PWS chooses to verify protected aquifer conditions, it shall submit the following additional data to DDW for each of its ground-water sources for which the protected aquifer conditions apply. The report must state that the aquifer meets the definition of a protected aquifer based on the following information:

(a) thickness, depth, and lithology of the protective clay layer;

(b) data to indicate the lateral continuity of the protective clay layer over the extent of zone two. This may include such data as correlation of beds in multiple wells, published hydrogeologic studies, stratigraphic studies, potentiometric surface studies, and so forth; and

(c) evidence that the well has been grouted or otherwise sealed from the ground surface to a depth of at least 100 feet and for a thickness of at least 30 feet through the protective clay layer in accordance with R309-600-6(1)(x) and R309-

515-6(6)(i).

R309-600-10. Potential Contamination Source Inventory and Identification and Assessment of Controls.

(1) Prioritized Inventory of Potential Contamination Sources - Each PWS shall list all potential contamination sources within each DWSP zone or management area in priority order and state the basis for this order. This priority ranking shall be according to relative risk to the drinking water source. The name and address of each commercial and industrial potential contamination source is required. Additional information should include the name and phone number of a contact person and a list of the chemical, biological, and/or radiological hazards associated with each potential contamination source. Additionally, each PWS shall identify each potential contamination source as to its location in zone one, two, three, four or in a management area and plot it on the map required in R309-600-9(6)(a)(viii) or R309-600-9(6)(b)(i).

(a) List of Potential Contamination Sources - A List of Potential Contamination Sources is found in the "Source Protection User's Guide for Ground-Water Sources." This document may be obtained from DDW. This list may be used by PWSs as a guide to inventorying potential contamination sources within their DWSP zones and management areas.

(b) Refining, Expanding, Updating, and Verifying Potential Contamination Sources - Each PWS shall update its list of potential contamination sources to show current conditions within DWSP zones or management areas. This includes adding potential contamination sources which have moved into DWSP zones or management areas, deleting potential contamination sources which have moved out, improving available data about potential contamination sources, and all other appropriate refinements.

(2) Identification and Assessment of Current Controls - PWSs are not required to plan and implement land management strategies for potential contamination source hazards that are assessed as "adequately controlled." If controls are not identified, the potential contamination source will be considered to be "not adequately controlled." Additionally, if the hazards at a potential contamination source cannot be identified, the potential contamination source must be assessed as "not adequately controlled." Identification and assessment should be limited to one of the following controls for each applicable hazard: regulatory, best management/pollution prevention, physical, or negligible quantity. Each of the following topics for a control must be addressed before identification and assessment will be considered to be complete. Refer to the "Source Protection User's Guide for Ground-Water Sources" for a list of government agencies and the programs they administer to control potential contamination sources. This guide may be obtained from DDW.

(a) Regulatory Controls - Identify the enforcement agency and verify that the hazard is being regulated by them; cite and/or quote applicable references in the regulation, rule or ordinance which pertain to controlling the hazard; explain how the regulatory control prevents ground-water contamination; assess the hazard; and set a date to reassess the hazard.

(b) Best Management/Pollution Prevention Practice Controls - List the specific best management/pollution prevention practices which have been implemented by potential contamination source management to control the hazard and indicate that they are willing to continue the use of these practices; explain how these practices prevent ground-water contamination; assess the hazard; and set a date to reassess the hazard.

(c) Physical Controls - Describe the physical control(s)

which have been constructed to control the hazard; explain how these controls prevent contamination; assess the hazard; and set a date to reassess the hazard.

(d) Negligible Quantity Control - Identify the quantity of the hazard that is being used, disposed, stored, manufactured, and/or transported; explain why this amount should be considered a negligible quantity; assess the hazard; and set a date to reassess the hazard.

(3) For the purpose of meeting the requirements of R309-600, the Director will consider a PWS's assessment that a potential contamination source which is covered by a permit or approval under one of the regulatory programs listed below sufficient to demonstrate that the source is adequately controlled unless otherwise determined by the Director. For all other state programs, the PWS's assessment is subject to review by the Director; as a result, a PWS's DWSP Plan may be disapproved if the Director does not concur with its assessment(s).

(a) The Utah Ground-Water Quality Protection program established by Section 19-5-104 and R317-6;

(b) closure plans or Part B permits under authority of the Resource Conservation and Recovery Act (RCRA) of 1984 regarding the monitoring and treatment of ground water;

(c) the Utah Pollutant Discharge Elimination System (UPDES) established by Section 19-5-104 and R317-8;

(d) the Underground Storage Tank Program established by Section 19-6-403 and R311-200 through R311-208; and

(e) the Underground Injection Control (UIC) Program for classes I-IV established by Sections 19-5-104 and 40-6-5 and R317-7 and R649-5.

R309-600-11. Management Program to Control Each Preexisting Potential Contamination Source.

(1) PWSs shall plan land management strategies to control each preexisting potential contamination source in accordance with their authority and jurisdiction. Land management strategies must be consistent with the provisions of R309-600, designed to control potential contamination, and may be regulatory or non-regulatory. Each potential contamination source listed on the inventory required in R309-600-10(1) and assessed as "not adequately controlled" must be addressed. Land management strategies must be implemented according to the schedule required in R309-600-7(1)(e).

(2) PWSs with overlapping protection zones and management areas may cooperate in controlling a particular preexisting potential contamination source if one PWS will agree to take the lead in planning and implementing land management strategies and the remaining PWS(s) will assess the preexisting potential contamination source as "adequately controlled."

R309-600-12. Management Program to Control or Prohibit Future Potential Contamination Sources for Existing Drinking Water Sources.

(1) PWSs shall plan land management strategies to control or prohibit future potential contamination sources within each of its DWSP zones or management areas consistent with the provisions of R309-600 and to an extent allowed under its authority and jurisdiction. Land management strategies must be designed to control potential contamination and may be regulatory or non-regulatory. Additionally land management strategies must be implemented according to the schedule required in R309-600-7(1)(e).

(2) Protection areas may extend into neighboring cities, towns, and counties. Since it may not be possible for some PWSs to enact regulatory land management strategies outside of their jurisdiction, except as described below, it is

recommended that these PWSs contact their neighboring cities, towns, and counties to see if they are willing to implement protective ordinances to prevent ground-water contamination under joint management agreements.

(3) Cities and towns have extraterritorial jurisdiction in accordance with Section 10-8-15 of the Utah Code Annotated to enact ordinances to protect a stream or "source" from which their water is taken... "for 15 miles above the point from which it is taken and for a distance of 300 feet on each side of such stream..." Section 10-8-15 includes ground-water sources.

(4) Zoning ordinances are an effective means to control potential contamination sources that may want to move into protection areas. They allow PWSs to prohibit facilities that would discharge contaminants directly to ground water. They also allow PWSs to review plans from potential contamination sources to ensure there will be adequate spill protection and waste disposal procedures, etc. If zoning ordinances are not used, PWSs must establish a plan to contact potential contamination sources individually as they move into protection areas, identify and assess their controls, and plan land management strategies if they are not adequately controlled.

R309-600-13. New Ground-water Sources of Drinking Water.

(1) Prior to constructing a new ground-water source of drinking water, each PWS shall develop a PER which demonstrates whether the source meets the requirements of this section and submit it to DDW. Additionally, engineering information in accordance with R309-515-6(5)(a) or R309-515-7(4) must be submitted to DDW. The Director will not grant plan approval until both source protection and engineering requirements are met. Construction standards relating to protection zones and management areas (fencing, diversion channels, sewer line construction, and grouting, etc.) are found in R309-515. After the source is constructed a DWSP Plan must be developed, submitted, and implemented accordingly.

(2) Preliminary Evaluation Report for New Sources of Drinking Water - PERs shall cover all four zones or the entire management area. PERs should be developed in accordance with the "Standard Report Format for New Wells and Springs." This document may be obtained from DDW. PWSs shall include the following four sections in each PER:

(a) Delineation Report for Estimated DWSP Zones - The same requirements apply as in R309-600-9(6), except that the hydrogeologic data for the PER must be developed using the best available data which may be obtained from: surrounding wells, published information, or surface geologic mapping. PWSs must use the Preferred Delineation Procedure to delineate protection zones for new wells. The Delineation Report for Estimated DWSP Zones shall be stamped and signed by a professional geologist or professional engineer unless the Optional Two-Mile Radius Delineation Procedure is used for a new spring.

(b) Inventory of Potential Contamination Sources and Identification and Assessment of Controls - The same requirements apply as in R309-600-10(1) and (2). Additionally, the PER must demonstrate that the source meets the following requirements:

(i) Protection Areas Delineated using the Preferred Delineation Procedure in Protected Aquifers - A PWS shall not locate a new ground-water source of drinking water where an uncontrolled potential contamination source or a pollution source exists within zone one.

(ii) Protection Areas Delineated using the Preferred Delineation Procedure in Unprotected Aquifers - A PWS shall not locate a new ground-water source of drinking water

where an uncontrolled potential contamination source or an uncontrolled pollution source exists within zone one. Additionally, a new ground-water source of drinking water may not be located where a pollution source exists within zone two unless the pollution source implements design standards which prevent contaminated discharges to ground water.

(iii) Management Areas Delineated using the Optional Two-Mile Radius Delineation Procedure - A PWS shall not locate a new spring where an uncontrolled potential contamination source or a pollution source exists within zone one. Additionally, a new spring may not be located where a pollution source exist within the management area unless: a hydrogeologic report in accordance with R309-600-9(6)(b)(ii) which verifies that it does not impact the spring; or the pollution source implements design standards which prevent contaminated discharges to ground water.

(c) Land Ownership Map - A land ownership map which includes all land within zones one and two or the entire management area. Additionally, include a list which exclusively identifies the land owners in zones one and two or the management area, the parcel(s) of land which they own, and the zone in which they own land. A land ownership map and list are not required if ordinances are used to protect these areas.

(d) Land Use Agreements, Letters of Intent, or Zoning Ordinances - Land use agreements which meet the requirements of the definition in R309-600-6(1)(p). Zoning ordinances which are already in effect or letters of intent may be substituted for land use agreements; however, they must accomplish the same level of protection that is required in a land use agreement. Letters of intent must be notarized, include the same language that is required in land use agreements, and contain the statement that "the owner agrees to record the land use agreement in the county recorder's office, if the source proves to be an acceptable drinking water source." The PWS shall not introduce a new source into its system until copies of all applicable recorded land use agreements are submitted to DDW.

(3) Sewers Within DWSP Zones and Management Areas - Sewer lines may not be located within zones one and two or a management area unless the criteria identified below are met. If sewer lines are located or planned to be located within zones one and two or a management area, the PER must demonstrate that they comply with these criteria. Sewer lines that comply with these criteria may be assessed as adequately controlled potential contamination sources.

(a) Unprotected Aquifers -

(i) Zone one- all sewer lines and laterals shall be at least 50 feet from the wellhead or margin of the collection area, and be constructed in accordance to R309-515-6.

(ii) Zone two- all sewer lines and laterals within zone two or a management area shall be constructed in accordance with R309-515-6.

(b) Protected Aquifers - in zone one all sewer lines and laterals shall be constructed in accordance with R309-515-6, and shall be at least 10 feet from the wellhead or margin of the collection area.

(4) Use waivers for the VOC and pesticide parameter groups may be issued if the inventory of potential contamination sources indicates that the chemicals within these parameter groups are not used, disposed, stored, transported, or manufactured within zones one, two, and three or the management area.

(5) Replacement Wells - A PER is not required for proposed wells, if the PWS receives written notification from the Director that the well is classified as a replacement well. The PWS must submit a letter requesting that the well be classified as a replacement well and include documentation to

show that the conditions required in R309-600-6(1)(y) are met. If a proposed well is classified as a replacement well, the PWS is still required to submit and obtain written approval for all other information as required in:

(a) DWSP Plan for New Sources of Drinking Water (refer to R309-600-13(6), and

(b) the Outline of Well Approval Process (refer to R309-515-6(5)).

(6) DWSP Plan for New Sources of Drinking Water - The PWS shall submit a DWSP Plan in accordance with R309-600-7(1) for any new ground-water source of drinking water within one year after the date of the Director's concurrence letter for the PER. In developing this DWSP Plan, PWSs shall refine the information in the PER by applying any new, as-constructed characteristics of the source (i.e., pumping rate, aquifer test, etc.).

R309-600-14. Contingency Plans.

PWSs shall submit a Contingency Plan which includes all sources of drinking water for their entire water system to DDW concurrently with the submission of their first DWSP Plan. Guidance for developing Contingency Plans may be found in the "Source Protection User's Guide for Ground-Water Sources." This document may be obtained from DDW.

R309-600-15. Public Notification.

A PWSs consumers must be notified that its DWSP plans are available for their review. This notification must be released to the public by December 31, 2003. Public notifications shall address all of the PWS's sources and include the following:

(a) A discussion of the general types of potential contamination sources within the protection zones;

(b) an analysis that rates the system's susceptibility to contamination as low, medium, or high; and

(c) a statement that the system's complete DWSP plans are available to the public upon request.

Examples of means of notifying the public and examples of public notification material are discussed in the "Source Protection User's Guide for Ground-Water Sources" which may be obtained from DDW.

R309-600-16. Monitoring Reduction Waivers.

(1) Three types of monitoring waivers are available to PWSs. They are: a) reliably and consistently, b) use, and c) susceptibility. The criteria for establishing a reliably and consistently waiver is set forth in R309-205. The criteria for use and susceptibility waivers follow.

(2) If a source's DWSP plan is due according to the schedule in R309-600-3, and is not submitted to DDW, its use and susceptibility waivers for the VOC and pesticide parameter groups (refer to R309-205-6(1)(e) and (f); and (R309-205-6(2)(h) and (i)) will expire unless an exception (refer to R309-600-4) for a new due date has been granted. Additionally, current use and susceptibility waivers for the VOC, pesticide and unregulated parameter groups will expire upon review of a DWSP plan, if these waivers are not addressed in the plan. Monitoring reduction waivers must be renewed every six years at the time the PWSs Updated DWSP Plans are due and be addressed therein.

(3) Use Waivers - If the chemicals within the VOC and/or pesticide parameter group(s) (refer to R309-200 table 200-3 and 200-2) have not been used, disposed, stored, transported, or manufactured within the past five years within zones one, two, and three, the source may be eligible for a use waiver. To qualify for a VOC and/or pesticide use waiver, a PWS must complete the following two steps:

(a) List the chemicals which are used, disposed, stored, transported, and manufactured at each potential

contamination source within zones one, two, and three where the use of the chemicals within the VOC and pesticide parameter groups are likely; and

(b) submit a dated statement which is signed by the system's designated person that none of the VOCs and pesticides within these respective parameter groups have been used, disposed, stored, transported, or manufactured within the past five years within zones one, two, and three.

(4) Susceptibility Waivers - If a source does not qualify for use waivers, and if reliably and consistently waivers have not been issued, it may be eligible for susceptibility waivers. Susceptibility waivers tolerate the use, disposal, storage, transport, and manufacture of chemicals within zones one, two, and three as long as the PWS can demonstrate that the source is not susceptible to contamination from them. To qualify for a VOC and/or pesticide susceptibility waiver, a PWS must complete the following steps:

(a) Submit the monitoring results of at least one applicable sample from the VOC and/or pesticide parameter group(s) that has been taken within the past six years. A non-detectable analysis for each chemical within the parameter group(s) is required;

(b) submit a dated statement from the designated person verifying that the PWS is confident that a susceptibility waiver for the VOC and/or pesticide parameter group(s) will not threaten public health; and

(c) verify that the source is developed in a protected aquifer, as defined in R309-600-6(1)(x), and have a public education program which addresses proper use and disposal practices for pesticides and VOCs which is described in the management sections of the DWSP plan.

(5) Special Waiver Conditions - Special scientific or engineering studies or best management practices may be developed to support a request for an exception to paragraph R309-600-16(4)(c) due to special conditions. These studies must be approved by the Director before the PWS begins the study. Special waiver condition studies may include:

(a) geology and construction/grout seal of the well to demonstrate geologic protection;

(b) memoranda of agreement which addresses best management practices for VOCs and/or pesticides with industrial, agricultural, and commercial facilities which use, store, transport, manufacture, or dispose of the chemicals within these parameter groups;

(c) public education programs which address best management practices for VOCs and/or pesticides;

(d) contaminant quantities;

(e) affected land area; and/or

(f) fate and transport studies of the VOCs and/or pesticides which are listed as hazards at the PCSs within zones one, two, and three, and any other conditions which may be identified by the PWS and approved by the Director.

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R309. Environmental Quality, Drinking Water.
R309-605. Source Protection: Drinking Water Source Protection for Surface Water Sources.
R309-605-1. Purpose.

Public Water Systems (PWSs) are responsible for protecting their sources of drinking water from contamination. R309-605 sets forth minimum requirements to establish a uniform, statewide program for implementation by PWSs to protect their surface water sources of drinking water. PWSs are encouraged to enact more stringent programs to protect their sources of drinking water if they decide additional measures are necessary.

R309-605 applies to PWSs which obtain surface water prior to treatment and distribution and to PWSs obtaining water from ground-water sources which are under the direct influence of surface water. However, compliance with this rule is voluntary for public (transient) non-community water systems to the extent that they are using existing surface water sources of drinking water.

R309-605-2. Authority.

Under authority of Subsection 19-4-104(1)(a)(iv), the Drinking Water Board adopts this rule which governs the protection of surface sources of drinking water.

R309-605-3. Definitions.

(1) The following terms are defined for the purposes of this rule:

(a) "Controls" means the codes, ordinances, rules, and regulations that regulate a potential contamination source. "Controls" also means physical controls which may prevent contaminants from migrating off of a site and into surface or ground water. Controls also means negligible quantities of contaminants.

(b) "Division" means Division of Drinking Water.

(c) "DWSP Program" means the program and associated plans to protect drinking water sources from contaminants.

(d) "DWSP Zone" means the surface and subsurface area surrounding a surface source of drinking water supplying a PWS, over which or through which contaminants are reasonably likely to move toward and reach the source.

(e) "Designated person" means the person appointed by a PWS to ensure that the requirements of R309-605 are met.

(f) "Director" means the Director of the Division of Drinking Water.

(g) "Existing surface water source of drinking water" means a public supply surface water source for which plans and specifications were submitted to DDW on or before June 12, 2000.

(h) "Intake", for the purposes of surface water drinking water source protection, means the device used to divert surface water and also the conveyance to the point immediately preceding treatment, or, if no treatment is provided, at the entry point to the distribution system.

(i) "Land management strategies" means zoning and non-zoning controls which include, but are not limited to, the following: zoning and subdivision ordinances, site plan reviews, design and operating standards, source prohibitions, purchase of property and development rights, public education programs, ground-water monitoring, household hazardous waste collection programs, water conservation programs, memoranda of understanding, and written contracts and agreements.

(j) "New surface water source of drinking water" means a public supply surface water source of drinking water for which plans and specifications are submitted to the Director after June 12, 2000.

(k) "Nonpoint source" means any area or conveyance not meeting the definition of point source.

(l) "Point of diversion" (POD) is the location at which water from a surface source enters a piped conveyance, storage tank, or is otherwise removed from open exposure prior to treatment.

(m) "Point source" means any discernible, confined, and discrete location or conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, animal feeding operation with more than ten animal units, landfill, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(n) "Pollution source" means point source discharges of contaminants to surface water or potential discharges of the liquid forms of "extremely hazardous substances" which are stored in containers in excess of "applicable threshold planning quantities" as specified in the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. 11001 et seq. (1986). Examples of possible pollution sources include, but are not limited to, the following: storage facilities that store the liquid forms of extremely hazardous substances, septic tanks, drain fields, class V underground injection wells, landfills, open dumps, land filling of sludge and septage, manure piles, salt piles, pit privies, drain lines, and animal feeding operations with more than ten animal units. The following definitions are part of R309-605 and clarify the meaning of "pollution source":

(i) "Animal feeding operation" means a lot or facility where the following conditions are met: animals have been or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period, and crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. Two or more animal feeding operations under common ownership are considered to be a single feeding operation if they adjoin each other, if they use a common area, or if they use a common system for the disposal of wastes.

(ii) "Animal unit" means a unit of measurement for any animal feeding operation calculated by adding the following numbers; the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 55 pounds multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

(iii) "Extremely hazardous substances" means those substances which are identified in the Sec. 302(EHS) column of the "TITLE III LIST OF LISTS - Consolidated List of Chemicals Subject to Reporting Under SARA Title III," (EPA 550-B-96-015). A copy of this document may be obtained from: NCEPI, PO Box 42419, Cincinnati, OH 45202. Online ordering is also available at: <http://www.epa.gov/ncepihom/orderpub.html>.

(o) "Potential contamination source" means any facility or site which employs an activity or procedure or stores materials which may potentially contaminate ground-water or surface water. A pollution source is also a potential contamination source.

(p) "PWS" means a public water system affected by this rule, as described in R309-605-1.

(q) "Surface water" means all water which is open to the atmosphere and subject to surface runoff (see also R309-515-5(1)).

(r) "Susceptibility" means the potential for a PWS to draw water contaminated above a demonstrated background water quality concentration through any combination of the following pathways: geologic strata and overlying soil, direct discharge, overland flow, upgradient water, cracks/fissures in or open areas of the surface water intake and/or the

pipe/conveyance between the intake and the water distribution system. Susceptibility is determined at the point immediately preceding treatment or, if no treatment is provided, at the entry point to the system.

(s) "Watershed" means the topographic boundary, up to the state's border, that is the perimeter of the catchment basin that provides water to the intake structure.

R309-605-4. Implementation.

(1) Existing Surface Water Sources - Each PWS shall submit a Drinking Water Source Protection (DWSP) Plan to the Division of Drinking Water (Division) in accordance with R309-605-7 for each of its existing surface water sources according to the following schedule.

TABLE	
Schedule for DWSP Plan Submittal	
Population served by PWS	DWSP Plans due by
Greater than 10,000	December 31, 2001
3,300 to 10,000	May 6, 2002
Fewer than 3,300	May 6, 2003

(2) New surface water sources - Each PWS shall submit a Preliminary Evaluation Report (PER) in accordance with R309-605-9 for each of its new surface water sources to the Director.

R309-605-5. Exceptions.

(1) Exceptions to the requirements of R309-605 or parts thereof may be granted by the Director to a PWS if, due to compelling factors (which may include economic factors), a PWS is unable to comply with these requirements, and the granting of an exception will not result in an unreasonable risk to health.

(2) The Director may prescribe a schedule by which the PWS must come into compliance with the requirements of R309-605.

R309-605-6. Designated Person.

(1) Each PWS shall designate a person responsible for demonstrating the PWS's compliance with these rules. A designated person shall be appointed and reported in writing to the Director by each PWS within 180 days of the effective date of R309-605. The name, address and telephone number of the designated person shall be included in each DWSP Plan and PER that is submitted to the Director, and in all other correspondence with the Division.

(2) Each PWS shall notify the Director in writing within 30 days of any changes in the appointment of a designated person.

R309-605-7. Drinking Water Source Protection (DWSP) for Surface Sources.

(1) DWSP Plans

(a) Each PWS shall develop, submit, and implement a DWSP Plan for each of its surface water sources of drinking water.

(i) Recognizing that more than one PWS may jointly use a source from the same or nearby diversions, the Director encourages collaboration among such PWSs with joint use of a source in the development of a DWSP plan for that source. PWSs who jointly submit an acceptable DWSP plan per R309-605-7 for one surface water source above common point(s) of diversion, will be considered to have met the requirement of R309-605-7(1)(a). The deadline from R309-605-4(1) that would apply to such a collaboration would be associated with the largest population served by the individual parties to the agreement.

(b) Required Sections for DWSP Plans - DWSP Plans should be developed in accordance with the "Standard Report Format for Surface Sources". This document may be obtained from the Division. DWSP Plans must include the following eight sections:

(i) DWSP Delineation Report - A DWSP Delineation Report in accordance with R309-605-7(3) is the first section of a DWSP Plan.

(ii) Susceptibility Analysis and Determination - A susceptibility analysis and determination in accordance with R309-605-7(4) is the second section of a DWSP report.

(iii) Management Program to Control Each Preexisting Potential Contamination Source - Land management strategies to control each not adequately controlled preexisting potential contamination source in accordance with R309-605-7(5) is the third section of a DWSP Plan.

(iv) Management Program to Control or Prohibit Future Potential Contamination Sources - Land management strategies for controlling or prohibiting future potential contamination sources is the fourth section of a DWSP Plan. This must be in accordance with R309-605-7(6), must be consistent with the general provisions of this rule, and implemented to an extent allowed under the PWS's authority and jurisdiction.

(v) Implementation Schedule - The implementation schedule is the fifth section of a DWSP Plan. Each PWS shall develop a step-by-step implementation schedule which lists each of its proposed land management strategies with an implementation date for each strategy.

(vi) Resource Evaluation - The resource evaluation is the sixth section of a DWSP Plan. Each PWS shall assess the financial and other resources which may be required for it to implement each of its DWSP Plans and determine how these resources may be acquired.

(vii) Recordkeeping - Recordkeeping is the seventh section of a DWSP Plan. Each PWS shall document changes in each of its DWSP Plans as they are updated to show significant changes in conditions in the protection zones. As a DWSP Plan is executed, the PWS shall document any land management strategies that are implemented. These documents may include any of the following: ordinances, codes, permits, memoranda of understanding, public education programs, and so forth.

(viii) Public Notification - A method for, schedule for and example of the means for notifying the public water system's customers and consumers regarding the drinking water source water assessment and the results of that assessment is the last section of a DWSP plan. This must be in accordance with R309-605-7(7).

(ix) Existing watershed or resource management plans - In lieu of some or all of the report sections described in R309-605-7(1)(b), the PWS may submit watershed or resource management plans that in whole or in part meet the requirements of this rule. Such plans shall be submitted to the Director with a cover letter that fully explains how they meet the requirements of the current DWSP rules. Any required section described in R309-605-7(1)(b) that is not covered by the watershed or resource management plan must be addressed and submitted jointly. The watershed or resource management plans will be subject to the same review and approval process as any other section of the DWSP plan.

(c) DWSP Plan Administration - DWSP Plans shall be submitted, corrected, retained, implemented, updated, and revised according to the following:

(i) Submitting DWSP Plans - Each PWS shall submit a DWSP Plan to the Director in accordance with the schedule in R309-605-4(2) for each of its surface water sources of drinking water (a joint development and submittal of a DWSP plan is acceptable for PWSs with the joint use of a source, per

R309-605-7(1)(a)(i).)

(ii) Correcting Deficiencies - Each PWS shall correct any deficiencies in a disapproved DWSP Plan and resubmit it to the Director within 90 days of the disapproval date.

(iii) Retaining DWSP Plans - Each PWS shall retain on its premises a current copy of each of its DWSP Plans. DWSP Plans shall be made available to the public upon request.

(iv) Implementing DWSP Plans - Each PWS shall begin implementing each of its DWSP Plans in accordance with its schedule in R309-605-7(1)(b)(v), within 180 days after submittal if they are not disapproved by the Director.

(v) Updating and Resubmitting DWSP Plans - Each PWS shall review and update its DWSP Plans as often as necessary to ensure that they show current conditions in the DWSP zones, but at least annually after the original due date (see R309-605-4(1)). Updated plans also document the implementation of land management strategies in the recordkeeping section. Updated DWSP Plans will be resubmitted to the Director every six years from their original due date, which is described in R309-605-4.

(vi) Revising DWSP Plans - Each PWS shall submit a revised DWSP Plan to the Director within 180 days after the reconstruction or redevelopment of any surface water source of drinking water which causes changes in source construction, source development, hydrogeology, delineation, potential contamination sources, or proposed land management strategies.

(2) DWSP Plan Review.

(a) The Director shall review each DWSP Plan submitted by PWSs and "concur," "conditionally concur" or "disapprove" the plan.

(b) The Director may "disapprove" DWSP Plans for good cause, including any of the following reasons:

(i) A DWSP Plan that is missing the delineation report or any of the information and data required in it (refer to R309-605-7(3));

(ii) An inaccurate Susceptibility Analysis or a DWSP Plan that is missing this report or any of the information required in it (refer to R309-605-7(4));

(iii) An inaccurate Prioritized Inventory of Potential Contamination Sources or a DWSP Plan that is missing this report or any of the information required in it (refer to R309-605-7(4)(c));

(iv) An inaccurate assessment of current controls (refer to R309-605-7(4)(a)(iii)(B));

(v) A missing or incomplete Management Program to Control Each Preexisting Potential Contamination Source which has been assessed as "not adequately controlled" by the PWS (refer to R309-605-7(5));

(vi) A missing or incomplete Management Program to Control or Prohibit Future Potential Contamination Sources (refer to R309-605-7(6));

(vii) A missing Implementation Schedule, Resource Evaluation, Recordkeeping Section, or Contingency Plan (refer to R309-605-7(1)(b)(v-vii) and R309-605-9);

(viii) A missing or incomplete Public Notification Section (refer to R309-605-7(7)).

(c) If the Director conditionally concurs with a DWSP Plan, the PWS must implement the conditions and report compliance the next time the DWSP Plan is due and submitted to the Director.

(3) Delineation of Protection Zones

(a) The delineation section of the DWSP plan for surface water sources may be obtained from the Division upon request. A delineation section prepared and provided by the Division would become the first section of the submittal from the PWS. The delineation section provided by the Division will consist of a map or maps showing the limits of

the zones described in R309-605-7(3)(b)(i-iv), and will include an inventory of potential contamination sources on record in the Division's Geographic Information System.

(b) Alternatively, the PWS may provide their own delineation report. Such a submittal must either describe the zones as defined in R309-605-7(3)(b)(i-iv), or must comply with the requirements and definitions of R309-605-7(3)(c). The delineation report must include a map or maps showing the extent of the zones.

(i) Zone 1:

(A) Streams, rivers and canals: zone 1 encompasses the area on both sides of the source, 1/2 mile on each side measured laterally from the high water mark of the source (bank full), and from 100 feet downstream of the POD to 15 miles upstream, or to the limits of the watershed or to the state line, whichever comes first. If a natural stream or river is diverted into an uncovered canal or aqueduct for the purpose of delivering water to a system or a water treatment facility, that entire canal will be considered to be part of zone 1, and the 15 mile measurement upstream will apply to the stream or river contributing water to the system from the diversion.

(B) Reservoirs or lakes: zone 1 is considered to be the area 1/2 mile from the high water mark of the source. Any stream or river contributing to the lake/reservoir will be included in zone 1 for a distance of 15 miles upstream, and 1/2 mile laterally on both sides of the source. If a reservoir is diverted into an uncovered canal or aqueduct for the purpose of delivering water to a system or a water treatment facility, that entire canal will be considered to be part of zone 1, and the 15 mile measurement upstream will apply to the reservoir and tributaries contributing water to the system.

(ii) Zone 2: Zone 2 is defined as the area from the end of zone 1, and an additional 50 miles upstream (or to the limits of the watershed or to the state line, whichever comes first), and 1000 feet on each side measured from the high water mark of the source.

(iii) Zone 3: Zone 3 is defined as the area from the end of zone 2 to the limits of the watershed or to the state line, whichever comes first, and 500 feet on each side measured from the high water mark of the source.

(iv) Zone 4: Zone 4 is defined as the remainder of the area of the watershed (up to the state line, if applicable) contributing to the source that does not fall within the boundaries of zones 1 through 3.

(v) Special case delineations:

(A) Basin Transfer PODs: Where water supplies are received from basin transfers, the water from the extraneous basin will be treated as a separate source, and will be subject to its own DWSP plan, starting from zone 1 at the secondary POD.

(c) If the PWS is able to demonstrate that a different zone configuration is more protective than those defined in R309-605-7(3)(b), that different configuration may be used upon prior review and approval by the Director. An explanation of the method used to obtain and establish the dimensions of the zones must be provided. The delineation report must include a map or maps showing the extent of the zones. The entire watershed boundary contributing to a source must be included in the delineation.

(4) Susceptibility Analysis and Determination:

(a) Susceptibility Analysis:

(i) Structural integrity of the intake: The PWS will evaluate the structural integrity of the intake to ensure compliance with the existing source development rule (R309-515-5) on a pass or fail basis. The pass-fail rating will be determined by whether the intake meets minimum rule requirements, and whether the physical condition of the intake is adequate to protect the intake from contamination

events. The integrity evaluation includes any portion of the conveyance from the point of diversion to the distribution systems that is open to the atmosphere or is otherwise vulnerable to contamination, including distribution canals, etc.

(ii) Sensitivity of Natural Setting: The PWS will evaluate the sensitivity of the source based on physiographic and/or hydrogeologic factors. Factors influencing sensitivity may include any natural or man-made feature that increases or decreases the likelihood of contamination. Sensitivity does not address the question of whether contamination is present in the watershed or recharge area.

(iii) Assessment of management of potential contamination sources:

(A) Potential Contamination Source Inventory

(I) Each PWS shall identify and list all potential contamination sources within DWSP zones 1, 2 and 3, as applicable for individual sources. The name and address of each non-residential potential contamination source is required, as well as a list of the chemical, biological, and/or radiological hazards associated with each potential contamination source. Additionally, each PWS shall identify each potential contamination source as to its location in zone one, two, or three and plot it on the map required in R309-605-7(3)(a and b). The PWS may rely on the inventory provided by the Division for zone 4.

(II) List of Potential Contamination Sources - A List of Potential Contamination Sources may be obtained from the Division. This list may be used by PWSs as an introduction to inventorying potential contamination sources within their DWSP zones. The list is not intended to be all-inclusive.

(III) Refining, Expanding, Updating, and Verifying Potential Contamination Sources - Each PWS shall update its list of potential contamination sources to show current conditions within DWSP zones according to R309-605-7(1)(c)(v). This includes adding potential contamination sources which have moved into DWSP zones, deleting potential contamination sources which have moved out, improving available data about potential contamination sources, and all other appropriate refinements.

(B) Identification and Assessment of Controls: The PWS will identify and assess the hazards at each potential contamination source, including those in the inventory provided by the Division that are located in zone 4, as "adequately controlled" or "not adequately controlled".

(I) If controls are not identified, the potential contamination source will be considered "not adequately controlled." Additionally, if the hazards at a potential contamination source cannot be or are not identified, the potential contamination source must be assessed as "not adequately controlled."

(II) Types of controls: For each hazard deemed to be controlled, one of the following controls shall be identified: regulatory, best management/pollution prevention, or physical controls. Negligible quantities of contaminants are also considered a control. The assessment of controls will not be considered complete unless the controls are completely evaluated and discussed in the DWSP report, using the following criteria:

Regulatory Controls - Identify the enforcement agency and verify that the hazard is being regulated by them; cite and/or quote applicable references in the regulation, rule or ordinance which pertain to controlling the hazard; explain how the regulatory controls affect the potential for surface water contamination; assess the hazard; and set a date to reassess the hazard. For assistance in identifying regulatory controls, refer to the "Source Protection User's Guide" Appendix D for a list of government agencies and the programs they administer to control potential contamination

sources. This guide may be obtained from the Division.

Best Management/Pollution Prevention Practice Controls - List the specific best management/pollution prevention practices which have been implemented by potential contamination source management to control the hazard and indicate that they are willing to continue the use of these practices; explain how these practices affect the potential for surface water contamination; assess the hazard; and set a date to reassess the hazard.

Physical Controls - Describe the physical control(s) which have been constructed to control the hazard; explain how these controls affect the potential for contamination; assess the hazard; and set a date to reassess the hazard.

Negligible Quantity Control - Identify the quantity of the hazard that is being used, disposed, stored, manufactured, and/or transported; explain why this amount is a negligible quantity; assess the hazard; and set a date to reassess the hazard.

(III) PWSs may assess controls on Potential Contamination Sources collectively, when the Potential Contamination Sources have similar characteristics, or when the Potential Contamination Sources are clustered geographically. Examples may include, but are not limited to, abandoned mines that are part of the same mining districts, underground storage tanks that are in the same zone, or leaking underground storage tanks in the same city. However, care should be taken to avoid collectively assessing Potential Contamination Sources to the extent that the assessments become meaningless. The Director may require an individual assessment for a Potential Contamination Source if the Director determines that the collective assessment does not adequately assess controls.

(C) A potential contamination source which is covered by a permit or approval under one of the regulatory programs listed below shall be considered to be adequately controlled unless otherwise determined by the Director. The PWS must provide documentation establishing that the Potential Contamination Source is covered by the regulatory program. For all other state regulatory programs, the PWS's assessment is subject to review by the Director; as a result, a PWS's DWSP Plan may be disapproved if the Director does not concur with its assessment(s).

(I) The Utah Ground-Water Quality Protection program established by Section 19-5-104 and Rule R317-6;

(II) Closure plans or Part B permits under authority of the Resource Conservation and Recovery Act (RCRA) of 1984 regarding the monitoring and treatment of ground-water;

(III) The Utah Pollutant Discharge Elimination System (UPDES) established by Section 19-5-104 and Rule R317-8; at the discretion of the PWS, this may include Confined Animal Feeding Operations/Animal Feeding Operations (CAFO/AFO) assessed under the Utah DWQ CAFO/AFO Strategy.

(IV) The Underground Storage Tank Program established by Section 19-6-403 and Rules R311-200 through R311-208; and

(V) the Underground Injection Control (UIC) Program for classes I-IV established by Sections 19-5-104 and 40-6-5 and Rules R317-7 and R649-5.

(b) Susceptibility determination:

(i) The PWS will assess the drinking water source for its susceptibility relative to each potential contamination source. The determination will be based on the following four factors: 1) the structural integrity of the intake, 2) the sensitivity of the natural setting, 3) whether a Potential Contamination Source is considered controlled or not, and 4) how the first three factors are interrelated. The PWS will provide an explanation of the method or judgement used to weigh the

first three factors against each other to determine susceptibility.

(ii) Additionally, each drinking water source will be assessed by the PWS for its overall susceptibility to potential contamination events. This will result in a qualitative assessment of the susceptibility of the drinking water source to contamination. This assessment of overall susceptibility allows the PWS and others to compare the susceptibility of one drinking water source to another.

(iii) Each surface water drinking water source in the state of Utah is initially considered to have a high susceptibility to contamination, due to the intrinsic unprotected nature of surface water sources. An assumption of high susceptibility will be used by the Director unless a PWS or a group of PWSs demonstrates otherwise, per R309-605, and receives concurrence from the Director under R309-605-7(2).

(c) Prioritized Potential Contamination Source Inventory: The PWS will prepare a prioritized inventory of potential contamination sources based on the susceptibility determinations in R309-605-7(4)(b)(i). The inventory will rank potential contamination sources based on the degree of threat posed to the drinking water source as determined in R309-605-7(4)(b)(i).

(5) Management Program to Control Each Preexisting Potential Contamination Source.

(a) PWSs are not required to plan and implement land management strategies for potential contamination source hazards that are assessed as "adequately controlled."

(b) With the first submittal of the DWSP Plan, PWSs shall include management strategies to reduce the risk of contamination from, at a minimum, each of the three highest priority uncontrolled Potential Contamination Sources in the protection zones for the source. The Director may require land management strategies for additional Potential Contamination Sources to assure adequate protection of the source. A management plan may be for one specific Potential Contamination Source (i.e., a sewage lagoon discharging into a stream), or for a group of similar or related Potential Contamination Sources that were assessed jointly under R309-605-7(4)(a)(iii)(B)(III) (i.e., one management plan for septic systems within one residential development would be acceptable, and would count as one of the three Potential Contamination Source management strategies).

PWSs shall plan land management strategies to control preexisting uncontrolled potential contamination sources in accordance with their existing authority and jurisdiction. Land management strategies must be consistent with the provisions of R309-605, designed to control or reduce the risk of potential contamination, and may be regulatory or non-regulatory. Land management strategies must be implemented according to the schedule required in R309-605-7(1)(b)(v).

(c) PWSs with overlapping protection zones may cooperate in controlling a particular preexisting potential contamination source if one PWS will agree to take the lead in planning and implementing land management strategies. The remaining PWS(s) will assess the preexisting potential contamination source as "adequately controlled."

(d) At each six year cycle for revising and resubmitting the DWSP Plan, under the schedule in R309-605-7(1)(c)(v), the PWS shall prioritize their inventory again, and shall propose a management program to control preexisting Potential Contamination Sources for the three highest priority Potential Contamination Sources, which may include uncontrolled Potential Contamination Sources not previously managed. The PWS shall also continue existing management programs, unless justification is provided that demonstrates that a Potential Contamination Source that was previously

managed is now considered controlled.

(6) Management Program to Control or Prohibit Future Potential Contamination Sources for Existing Drinking Water Sources.

(a) PWSs shall plan land management strategies to control or prohibit future potential contamination sources within each of its DWSP zones consistent with the provisions of R309-605 and to the extent allowed under its authority and jurisdiction. Land management strategies must be designed to control or reduce the risk of potential contamination and may be regulatory or non-regulatory. Additionally land management strategies must be implemented according to the schedule required in R309-605-7(1)(b)(v).

(b) Protection areas may extend into neighboring cities, towns, and counties. Since it may not be possible for some PWSs to enact regulatory land management strategies outside of their jurisdiction, except for municipalities as described below, it is recommended that these PWSs contact their neighboring cities, towns, and counties to see if they are willing to implement protective ordinances to prevent surface water contamination under joint management agreements.

(c) Cities and towns have extrajurisdictional jurisdiction in accordance with Section 10-8-15 of the Utah Code Annotated to enact ordinances to protect a stream or "source" from which their water is taken... "for 15 miles above the point from which it is taken and for a distance of 300 feet on each side of such stream...."

(d) Zoning ordinances are an effective means to control potential contamination sources that may want to move into protection areas. They allow PWSs to prohibit facilities that would discharge contaminants directly to surface water. They also allow PWSs to review plans from potential contamination sources to ensure there will be adequate spill protection and waste disposal procedures, etc. If zoning ordinances are not used, PWSs must establish a plan to contact potential contamination sources individually as they move into protection areas, identify and assess their controls, and plan land management strategies if they are not adequately controlled.

(7) Public Notification:

Within their DWSP report, each PWS shall specify the method and schedule for notifying their customers and consumers that an assessment of their surface water source has been completed and what the results of that assessment are. Each PWS shall provide the proposed public notification material as an appendix to the DWSP report. The public notification material shall include a discussion of the general geologic and physical setting of the source, the sensitivity of the setting, general types of potential contamination sources in the area, how susceptible the drinking water source is to potential contamination and a map showing the location of the drinking water source and generalized areas of potential concern (it is not mandatory to show the location of the intake itself). The public notification material will be in plain English. The purpose of this public notification is to advise the public regarding how susceptible their drinking water source is to potential contamination sources. Examples of means of notifying the public, and examples of acceptable public notification materials, are available from the Division. The public notification materials must be approved by the Director prior to distribution.

R309-605-8. DWSP for Ground-Water Sources Under the Direct Influence of Surface Water Sources.

(1) DWSP for ground-water sources under the direct influence of surface water sources will be accomplished through delineation of both the ground-water and surface water contribution areas. The requirements of R309-600 will apply to the ground-water portion, and the requirements of

R309-605 will apply to the surface water portion, except that the schedule for such DWSP plans under this section will be based on the schedule shown in R309-605-4(1).

R309-605-9. New Surface Water Sources of Drinking Water.

(1) Prior to constructing a new surface water source of drinking water, each PWS shall develop a preliminary evaluation report (PER) which demonstrates that the source location has been chosen such that the number of uncontrolled sources in zones 1 and 2 is minimized. If the source water is not currently classified as Class 1C under UAC R317-2, the PWS must request such a classification from the Water Quality Board for zones 1 and 2. The PWS must also request that the source water be categorized as High Quality Waters - Category 1 or 2 under UAC R317-2-3 (Antidegradation Policy), if applicable. In addition, engineering information in accordance with R309-515-4 and R309-515-5 (general source development and surface water source development requirements) must be submitted to the Director concurrent with the PER. A complete DWSP plan is required, one year after approval of the PER and after construction of the source intake, following the requirements of R309-605-7.

(2) Preliminary Evaluation Report (PER) for New Sources of Drinking Water - PERs shall cover all four zones. PERs should be developed in accordance with the "Standard Report Format for New Surface Sources." This document may be obtained from the Division. PWSs shall include the following four sections in each PER:

(a) Delineation Report for Estimated DWSP Zones - The same requirements apply as in R309-605-7(3).

(b) Susceptibility Analysis and determination (including inventory)- The same requirements apply as in R309-605-7(4).

(c) Land Use Map - A land use map which includes all land within zones one and two and the primary use of the land (residential, commercial, industrial, recreational, crops, animal husbandry, etc). Existing maps or GIS data may be used to satisfy this requirement.

(d) Documentation of Division of Water Quality classification of source water - with reference to R317-2, provide documentation of the classification of the source waters by the Water Quality Board/Division of Water Quality (see also R309-605-9(1)), and of any associated petition for a change in classification.

(3) DWSP Plan for New Sources of Drinking Water - The PWS shall submit a DWSP Plan in accordance with R309-605-4 for any new surface water source of drinking water within one year after the date of the Director's concurrence letter with the PER. In developing this DWSP Plan, PWSs shall refine the information in the PER by applying any new characteristics of the source.

R309-605-10. Contingency Plans.

PWSs shall submit a Contingency Plan which includes all sources of drinking water (groundwater and surface water) for their entire water system to the Director concurrently with the submission of their first DWSP Plan. The Contingency Plan shall address emergency response, rationing, water supply decontamination, and development of alternative sources.

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R309. Environmental Quality, Drinking Water.
R309-700. Financial Assistance: State Drinking Water State Revolving Fund (SRF) Loan Program.
R309-700-1. Purpose.

This rule establishes criteria for financial assistance to public drinking water systems in accordance with Title 73, Chapter 10c, Utah Code Annotated using funds made available by the Utah legislature from time to time for this purpose.

R309-700-2. Statutory Authority.

The authority for the Department of Environmental Quality acting through the Drinking Water Board to issue loans to political subdivisions to finance all or part of drinking water project costs and to enter into "credit enhancement agreements", "interest buy-down agreements", and "Hardship Grants" is provided in Title 73, Chapter 10c, Utah Code.

R309-700-3. Definitions and Eligibility.

Title 73, Chapter 10c, subsection 4(2)(a) limits eligibility for financial assistance under this section to political subdivisions.

Definitions for terms used in this rule are given in R309-110. Definitions for terms specific to this rule are given below.

"Board" means the Drinking Water Board.

"Drinking Water Project" means any work or facility that is necessary or desirable to provide water for human consumption and other domestic uses. Its scope includes collection, treatment, storage, and distribution facilities; and also includes studies, planning, education activities, and design work that will promote protecting the public from waterborne health risks.

"Project Costs" include the cost of acquiring and constructing any project including, without limitation: the cost of acquisition and construction of any facility or any modification, improvement, or extension of such facility; any cost incident to the acquisition of any necessary project, easement or right of way, engineering or architectural fees, legal fees, fiscal agents' and financial advisors' fees; any cost incurred for any preliminary planning to determine the economic and engineering feasibility of a proposed project; costs of economic investigations and studies, surveys, preparation of designs, plans, working drawings, specifications and the inspection and supervision of the construction of any facility; interest accruing on loans made under this program during acquisition and construction of the project; costs for studies, planning, education activities, and design work that will promote protecting the public from waterborne health risks; and any other cost incurred by the Board or the Department of Environmental Quality, in connection with the issuance of obligation to evidence any loan made to it under the law.

"Disadvantaged Communities" are defined as those communities located in an area which has a median adjusted gross income less than or equal to 80% of the State's median adjusted gross income, as determined by the Utah State Tax Commission from federal individual income tax returns excluding zero exemption returns, or where the estimated annual cost, including loan repayment costs, of drinking water service for the average residential user exceeds 1.75% of the median adjusted gross income. If, in the judgment of the Board, the State Tax Commission data is insufficient the Board may accept other measurements of the water users' income (i.e. local income survey or questionnaire when there is a significant difference between the number of service connections for a system and the number of tax filing for a given zip code or city).

"Drinking Water Project Obligation" means any bond, note or other obligation issued to finance all or part of the cost of acquiring, constructing, expanding, upgrading or improving a drinking water project, including, but not limited to, preliminary planning, studies, surveys, engineering or architectural fees, and preparation of plans and specifications.

"Credit Enhancement Agreement" means any agreement entered into between the Board, on behalf of the State, and an eligible water system for the purpose of providing methods and assistance to eligible water systems to improve the security for and marketability of drinking water project obligations.

"Eligible Water System" means any community drinking water system owned by a political subdivision of the State.

"Interest Buy-Down Agreement" means any agreement entered into between the Board, on behalf of the State, and an eligible water system, for the purpose of reducing the cost of financing incurred by an eligible water system on bonds issued by the subdivision for project costs.

"Financial Assistance" means a project loan, credit enhancement agreement, interest buy-down agreement, or technical assistance.

"Interest" means an assessment applied to loan recipients. The assessment shall be calculated as a percentage of principal.

"Emergency" means an unexpected, serious occurrence or situation requiring urgent or immediate action resulting from the failure of equipment or other infrastructure, or contamination of the water supply, threatening the health and / or safety of the public / water users.

R309-700-4. Application and Project Initiation Procedures.

The following procedures must normally be followed to obtain financial assistance from the Board:

(1) It is the responsibility of the applicant to obtain the necessary financial, legal and engineering counsel to prepare its application and an effective and appropriate financial assistance agreement.

(2) The applicant is required to submit a completed application form, an engineering report listing the project alternatives considered and including a justification for the chosen alternative, a project financing plan that includes an evaluation of credit enhancement, interest buy-down and loan methods applicable to the project, and documents necessary to perform a financial capability assessment (when requested), and capacity assessment (when determined to be beneficial for evaluating project feasibility). Comments from the local health department and/or district engineer may accompany the application. Comments from other interested parties such as an association of governments will also be accepted. Those costs incurred subsequent to the submission of a completed funding application form to the Board and prior to the execution of a financial assistance agreement and which meet the criteria for project costs are eligible for reimbursement from the proceeds of the financial assistance agreement.

(3) Division staff will evaluate the application and supporting documentation, calculate proposed terms of financial assistance, prepare a report for review by the Board, and present said report to the Board for its consideration.

(4) The Board may authorize financial assistance for the project on the basis of the staff's feasibility report and designate whether a loan, credit enhancement agreement, interest buy-down agreement, hardship grant or any combination thereof, is to be entered into, and approve the project schedule (see R309-700-13). The Board shall authorize a hardship grant only if it determines that other financing alternatives are unavailable or unreasonably expensive to the applicant (see R309-700-5). If the applicant

seeks financial assistance in the form of a loan of amounts in the security account established pursuant to Chapter 10c, Title 73 Utah Code, which loan is intended to provide direct financing of projects costs, then the Board shall authorize such loan only if it determines that credit enhancement agreements, interest buy-down agreements and other financing alternatives are unavailable or unreasonably expensive to the applicant or that a loan represents the financing alternative most economically advantageous to the state and the applicant; provided, that for purposes of this paragraph and for purposes of Section 73-10c-4(2), Utah Code, the term "loan" shall not include loans issued in connection with interest buy-down agreements as described in R309-700-10(2) or in connection with any other interest buy-down arrangement.

(5) Planning Grant - The applicant must submit an application provided by the Division and attach a scope of work, project schedule, cost estimates, and a draft contract for planning services.

(6) Planning Loan - The applicant requesting a Planning Loan must complete an application for a Planning Loan, prepare a plan of study, satisfactorily demonstrate procurement of planning services, and prepare a draft contract for planning services including financial evaluations and a schedule of work.

(7) Design Grant or Loan - The applicant requesting a Design Grant or Loan must have completed an engineering plan meeting program requirements.

(8) The applicant must demonstrate public support for the project. As a minimum, for a loan to be secured by a revenue bond, the Sponsor must mail notices to each water user in the Sponsor's service area informing them of a public hearing. In addition to the time and location of the public hearing the notice shall inform water users of the Sponsor's intent to issue a non-voted revenue bond to the Board, shall describe the face amount of the bond, the rate of interest, the repayment schedule and shall describe the impact of the project on the user including: user rates, impact and connection fees. The notice shall state that water users may respond to the Sponsor in writing or in the public hearing within ten days after the date of the notice. A copy of all written responses and a certified record of a public hearing shall be forwarded to the Division of Drinking Water.

(9) For financial assistance mechanisms when the applicant's bond is purchased by the Board, the project applicant's bond documentation, including an opinion from legal counsel experienced in bond matters that the drinking water project obligation is a valid and binding obligation of the applicant (see R309-700-13(3)), must be submitted to the Assistant Attorney General for preliminary approval and the applicant shall publish a Notice of Intent to issue bonds in a newspaper of general circulation pursuant to the Utah Code, Section 11-14-21. For financial assistance mechanisms when the applicant's bond is not purchased by the Board, the applicant shall submit a true and correct copy of an opinion from legal counsel experienced in bond matters that the drinking water project obligation is a valid and binding obligation of the applicant.

(10) Hardship Grant - The Board or its designee executes a grant agreement setting forth the terms and conditions of the grant.

(11) As authorized in 19-4-106(2)(c) of the Utah Code, the Director may review plans, specifications, and other data pertinent to proposed or expanded water supply systems to insure proper design and construction, as specified in rule R309-500-4 General. Construction of a public drinking water project shall not begin until complete plans and specifications have been approved in writing by the Director.

(12) If a project is designated to be financed by the

Board through a loan or an interest buy-down agreement as described in R309-700-10(2) to cover any part of project costs an account supervised by the applicant and the Board will be established by the applicant to assure that loan funds are used only for qualified project costs. If financial assistance for the project is provided by the Board in the form of a credit enhancement or interest buy-down agreement as described in R309-700-10(1) all project funds will be maintained in a separate account and a quarterly report of project expenditures will be provided to the Board.

(13) If a revenue bond is to be used to secure a loan, a User Charge Ordinance must be submitted to the Board for review and approval to insure adequate provisions for debt retirement and/or operation and maintenance. If a general obligation bond is to be used to secure a loan, a User Charge Ordinance must be submitted to the Board for review and approval to insure the system will have adequate resources to provide acceptable service.

(14) A plan of operation for the completed project, including staffing with an appropriately certified (in accordance with R309-300) operator, staff training, and procedures to assure efficient start-up, operation and maintenance of the project, must be submitted by the applicant and approved by the Board, its Director or other designee.

(15) The applicant's contract with its engineer must be submitted to the Board for review to determine that there will be adequate engineering involvement, including project supervision and inspection, to successfully complete the project.

(16) The applicant's attorney must provide an opinion to the Board regarding legal incorporation of the applicant, valid legal title to rights-of-way and the project site, and adequacy of bidding and contract documents.

(17) CREDIT ENHANCEMENT AGREEMENT AND INTEREST BUY-DOWN AGREEMENT ONLY - The Board executes the credit enhancement agreement or interest buy-down agreement setting forth the terms and conditions of the security or other forms of assistance provided by the agreement and notifies the applicant to sell the bonds (See R309-700-9 and -10).

(18) CREDIT ENHANCEMENT AGREEMENT AND INTEREST BUY-DOWN AGREEMENT ONLY - The applicant sells the bonds and notifies the Board of the terms of sale. If a credit enhancement agreement is utilized, the bonds shall contain the legend required by Section 73-10c-6(3)(d), Utah Code. If an interest buy-down agreement is utilized, the bonds shall bear a legend which makes reference to the interest buy-down agreement and states that such agreement does not constitute a pledge of or charge against the general revenues, credit or taxing powers of the state and that the holder of any such bond may look only to the applicant and the funds and revenues pledged by the applicant for the payment of interest and principal on the bonds.

(19) The applicant opens bids for the project.

(20) LOAN ONLY - The Board approves purchase of the bonds and executes the loan contract (see R309-700-4(24)).

(21) LOAN ONLY - The loan closing is conducted.

(22) A preconstruction conference shall be held.

(23) The applicant issues a written notice to proceed to the contractor.

(24) The applicant must have adopted a Water Conservation Plan prior to executing the loan agreement.

R309-700-5. Loan, Credit Enhancement, Interest Buy-Down, and Hardship Grant Consideration Policy.

(1) Board Priority Determination. In determining the priority for financial assistance the Board shall consider:

- (a) The ability of the applicant to obtain funds for the drinking water project from other sources or to finance such project from its own resources;
- (b) The ability of the applicant to repay the loan or other project obligations;
- (c) Whether a good faith effort to secure all or part of the services needed from the private sector through privatization has been made; and
- (d) Whether the drinking water project:
- meets a critical local or state need;
 - is cost effective;
 - will protect against present or potential hazards;
 - is needed to comply with the minimum standards of the Federal Safe Drinking Water Act, 42 USC, 300f, et. seq. or similar or successor statute;
- (v) is needed to comply with the minimum standards of the Utah Safe Drinking Water Act, Title 19, Chapter 4 or similar or successor statute.
- (vi) is needed as a result of an Emergency.
- (e) The overall financial impact of the proposed project on the citizens of the community, including direct and overlapping indebtedness, tax levies, user charges, impact or connection fees, special assessments, etc., resulting from the proposed project, and anticipated operation and maintenance costs versus the median income of the community;
- (f) Consistency with other funding source commitments which may have been obtained for the project;
- (g) The point total from an evaluation of the criteria listed in Table 1;

TABLE 1

NEED FOR PROJECT	POINTS
1. PUBLIC HEALTH AND WELFARE (SELECT ONE)	
A. There is evidence that waterborne illnesses have occurred	15
B. There are reports of illnesses which may be waterborne	10
C. No reports of waterborne illness, but high potential for such exists	5
D. No reports of possible waterborne illness and low potential for such exists	0
2. WATER QUALITY RECORD (SELECT ONE)	
A. Primary Maximum Contaminant Level (MCL) violation more than 6 times in preceding 12 months	15
B. In the past 12 months violated a primary MCL 4 to 6 times	12
C. In the past 12 months violated a primary MCL 2 to 3 times or exceeded the Secondary Drinking Water Standards by double	9
D. In the past 12 months violated MCL 1 time	6
E. Violation of the Secondary Drinking Water Standards	5
F. Does not meet all applicable MCL goals	3
G. Meets all MCLs and MCL goals	0
3. VERIFICATION OF POTENTIAL SHORTCOMINGS (SELECT ONE)	
A. Has had sanitary survey within the last year	5
B. Has had sanitary survey within the last five years	3
C. Has not had sanitary survey within last five years	0
4. GENERAL CONDITIONS OF EXISTING FACILITIES (SELECT ALL THOSE WHICH ARE TRUE AND PROJECT WILL REMEDY)	
A. The necessary water treatment facilities do not exist, not functioning, functioning but do not meet the requirements of the Utah Public Drinking Water Rules (UPDWR)	10
B. Sources are not developed or protected according to UPDWR	10
C. Source capacity is not adequate to meet current demands and system occasionally goes dry or suffers from low pressures	10

D. Significant areas within distribution system have inadequate fire protection	8
E. Existing storage tanks leak excessively or are structurally flawed	5
F. Pipe leak repair rate is greater than 4 leaks per 100 connections per year	2
G. Existing facilities are generally sound and meeting existing needs	0
5. ABILITY TO MEET FUTURE DEMANDS (Select One)	
A. Facilities have inadequate capacity and cannot reliably meet current demands	10
B. Facilities will become inadequate within the next three years	5
C. Facilities will become inadequate within the next five to ten years	3
6. OVERALL URGENCY (Select One)	
A. System is generally out of water. There is no fire protection or water for flushing toilets	10
B. System delivers water which cannot be rendered safe by boiling	10
C. System delivers water which can be rendered safe by boiling	8
D. System is occasionally out of water	5
E. Situation should be corrected, but is not urgent	0
TOTAL POSSIBLE POINTS FOR NEED FOR PROJECT	100

(h) Other criteria that the Board may deem appropriate.

(2) Drinking Water Board Financial Assistance Determination. The amount and type of financial assistance offered will be based on the following considerations:

(a) An evaluation based upon the criteria in Table 2 of the applicant's financial condition, the project's impact on the community, and the applicant's commitment to operating a responsible water system.

The interest rate to be charged by the Board for its financial assistance will be computed using the number of points assigned to the project from Table 2 to reduce, in a manner determined by Board resolution from time to time, the most recent Revenue Bond Buyer Index (RBBI) as published by the Bond Buyer's Guide. The interest rate so calculated will be assigned to the financial assistance. To encourage rapid repayment of a loan the Board will increase the interest rate 0.02 per cent (0.02%) for each year the repayment period exceeds five (5.0) years.

For hardship grant consideration, exclusive of planning and design grants or loans described in Sections R309-700-6, 7 and 8, the estimated annual cost of drinking water service for the average residential user should exceed 1.75% of the median adjusted gross household income from the most recent available State Tax Commission records or the local median adjusted gross income (MAGI) is less than or equal to eighty-percent (80.0%) of the State's median adjusted gross income. When considering funding for planning and design grants and loans described in Sections R309-700-6, 7 and 8, the Board will consider whether or not the applicant's local MAGI meets the above criteria for hardship grant funding. If, in the judgment of the Board, the State Tax Commission data is insufficient, the Board may accept other measurements of the water users' income (i.e. local income survey or questionnaire when there is a significant difference between the number of service connections for a system and the number of tax filings for a given zip code or city). The Board will also consider the applicant's level of contribution to the project.

TABLE 2

FINANCIAL CONSIDERATIONS	POINTS
1. COST EFFECTIVENESS RATIO (SELECT ONE)	
A. Project cost \$0 to \$500 per benefitting	

connection	16
B. \$501 to \$1,500	14
C. \$1,501 to \$2,000	11
D. \$2,001 to \$3,000	8
E. \$3,001 to \$5,000	4
F. \$5,001 to \$10,000	1
G. Over \$10,000	0
2. CURRENT LOCAL MEDIAN ADJUSTED GROSS INCOME (AGI) (SELECT ONE)	
A. Less than 70% of State Median AGI	19
B. 71 to 80% of State Median AGI	16
C. 81 to 95% of State Median AGI	13
D. 96 to 110% of State Median AGI	9
E. 111 to 130% of State Median AGI	6
F. 131 to 150% of State Median AGI	3
G. Greater than 150% of State Median AGI	0
3. APPLICANT'S COMMITMENT TO PROJECT FUNDING CONTRIBUTED BY APPLICANT (SELECT ONE)	
A. Greater than 25% of project funds	17
B. 15 to 25% of project funds	14
C. 10 to 15% of project funds	11
D. 5 to 10% of project funds	8
E. 2 to 5% of project funds	4
F. Less than 2% of project funds	0
4. ABILITY TO REPAY LOAN:	
4. WATER BILL (INCLUDING TAXES) AFTER PROJECT IS BUILT RELATIVE TO LOCAL MEDIAN ADJUSTED GROSS INCOME (SELECT ONE)	
A. Greater than 2.50% of local median AGI	16
B. 2.01 to 2.50% of local median AGI	12
C. 1.51 to 2.00% of local median AGI	8
D. 1.01 to 1.50% of local median AGI	3
E. 0 to 1.00% of local median AGI	0
5. SPECIAL INCENTIVES: Applicant (SELECT ALL THAT APPLY.)	
A. Has a replacement fund receiving annual deposits of about 5% of the system's annual drinking water (DW) budget and fund has already accumulated a minimum of 10% of said annual DW budget in this reserve fund.	5
B. Has, in addition to item 5.A., accumulated an amount equal to at least 20% of its annual DW budget in its replacement fund.	5
C. Is creating or enhancing a regionalization plan	16
D. Has a rate structure encouraging conservation	6
TOTAL POSSIBLE POINTS FOR FINANCIAL NEED	100

(b) Optimizing return on the security account while still allowing the project to proceed.

(c) Local political and economic conditions.

(d) Cost effectiveness evaluation of financing alternatives.

(e) Availability of funds in the security account.

(f) Environmental need.

(g) Other criteria the Board may deem appropriate.

R309-700-6. Planning Grant.

(1) A Planning Grant can only be made to a political subdivision with a population less than 10,000 people demonstrating an urgent need to evaluate its drinking water system's technical, financial and managerial capacity, and lacks the financial means to readily accomplish such an evaluation.

(2) Qualifying for a Planning Grant will be based on the criteria listed in R309-700-5(2)(a).

(3) The applicant must demonstrate that all funds necessary to complete project planning will be available prior to commencing the planning effort. The Planning Grant will be deposited with these other funds into a supervised escrow account at the time the grant agreement between the applicant and the Board is executed or the Board may choose to provide the funds in incremental disbursements as the applicant incurs expenses on the project.

(4) Failure on the part of the recipient of a Planning Grant to implement the findings of the plan may prejudice any

future applications for drinking water project funding.

(5) The recipient of a Planning Grant must first receive written approval for any cost increases or changes to the scope of work.

(6) The Planning Grant recipient must provide a copy of the planning project results to the Division. The planning effort shall conform to rules R309.

R309-700-7. Planning Loan.

(1) A Planning Loan can only be made to a political subdivision which demonstrates a financial hardship preventing the completion of project planning.

(2) A Planning Loan is made to a political subdivision with the intent to provide interim financial assistance for project planning until the long-term project financing can be secured. The Planning Loan must be repaid to the Board unless the payment obligation is waived by the Board.

(3) The applicant must demonstrate that all funds necessary to complete project planning will be available prior to commencing the planning effort. The Planning Loan will be deposited with these other funds into a supervised escrow account at the time the loan agreement between the applicant and the Board is executed.

(4) The recipient of a Planning Loan must first receive written approval from the Division Director for any cost increases or changes to the scope of work.

(5) A copy of the document(s) prepared by means of the planning loan shall be submitted to the Division.

R309-700-8. Design Grant or Loan.

(1) A Design Grant or Loan can only be made to a political subdivision demonstrating financial hardship preventing completion of project design. For purposes of this Section R309-700-8, project design means engineering plans and specifications, construction contracts, and associated work.

(2) A Design Grant or Loan is made to a political subdivision with the intent to provide interim financial assistance for the completion of the project design until the long-term project financing can be secured. The Design Grant or Loan must be repaid to the Board unless the payment obligation is waived by the Board as authorized by 73-10c-4(3)(b).

(3) The applicant must demonstrate that all funds necessary to complete the project design will be available prior to commencing the design effort. The Design Grant or Loan will be deposited with these other funds into a supervised escrow account at the time the grant or loan agreement between the applicant and the Board is executed.

(4) The recipient of a Design Grant or Loan must first receive written approval from the Board before incurring any cost increases or changes to the scope of work.

R309-700-9. Credit Enhancement Agreements.

The Board will determine whether a project may receive all or part of a loan, credit enhancement agreement or interest buy-down agreement subject to the criteria in R309-700-5. To provide security for project obligations the Board may agree to purchase project obligations of applicants or make loans to the applicants to prevent defaults in payments on project obligations. The Board may also consider making loans to the applicants to pay the cost of obtaining letters of credit from various financial institutions, municipal bond insurance, or other forms of insurance or security for project obligations. In addition, the Board may consider other methods and assistance to applicants to properly enhance the marketability of or security for project obligations.

R309-700-10. Interest Buy-Down Agreements.

Interest buy-down agreements may consist of:

(1) A financing agreement between the Board and applicant whereby a specified sum is loaned or granted to the applicant to be placed in a trust account. The trust account shall be used exclusively to reduce the cost of financing for the project.

(2) A financing agreement between the Board and the applicant whereby the proceeds of bonds purchased by the Board is combined with proceeds from publicly issued bonds to finance the project. The rate of interest on bonds purchased by the Board may carry an interest rate lower than the interest rate on the publicly issued bonds, which when blended together will provide a reduced annual debt service for the project.

(3) Any other legal method of financing which reduces the annual payment amount on locally issued bonds. After credit enhancement agreements have been evaluated by the Board and it is determined that this method is not feasible or additional assistance is required, interest buy-down agreements and loans may be considered. Once the level of financial assistance required to make the project financially feasible is determined, a cost effective evaluation of interest buy-down options and loans must be completed. The financing alternative chosen should be the one most economically advantageous for the state and the applicant.

R309-700-11. Loans.

The Board may make loans to finance all or part of a drinking water project only after credit enhancement agreements and interest buy-down agreements have been evaluated and found either unavailable or unreasonably expensive. The financing alternative chosen should be the one most economically advantageous for the state and its political subdivisions.

R309-700-12. Project Authorization (Reference R309-700-4(4)).

A project may be "Authorized" for a loan, credit enhancement agreement, interest buy-down agreement, or hardship grant in writing by the Board following submission and favorable review of an application form, engineering report (if required), financial capability assessment, staff feasibility report, and capacity assessment (when determined to be beneficial for evaluating project feasibility). The engineering report shall include a cost effectiveness analysis of feasible project alternatives capable of meeting State and Federal drinking water requirements. It shall include consideration of monetary costs including the present worth or equivalent annual value of all capital costs, operation, maintenance, and replacement costs. The alternative selected must be the most economical means of meeting applicable State and Federal drinking water requirements over the useful life of the facility while recognizing environmental and other nonmonetary considerations. If it is anticipated that a project will be a candidate for financial assistance from the Board, the Staff should be contacted, and the plan of study for the engineering report (if required) should be approved before the planning is initiated.

Once the application form and other related documents have been reviewed and assessments made, the staff will prepare a project feasibility report for the Board's consideration in Authorizing a project. The project feasibility report will include a detailed evaluation of the project with regard to the Board's funding priority criteria, and will contain recommendations for the type of financial assistance which may be extended (i.e., for a loan, credit enhancement agreement, interest buy-down agreement, or hardship grant).

Project Authorization is not a contractual commitment and is conditioned upon the availability of funds at the time of

loan closing or signing of the credit enhancement, interest buy-down, or grant agreement and upon adherence to the project schedule approved at that time. If the project is not proceeding according to the project schedule the Board may withdraw the project Authorization so that projects which are ready to proceed can obtain necessary funding. Extensions to the project schedule may be considered by the Board, but any extension requested must be fully justified.

R309-700-13. Financial Evaluations.

(1) The Board considers it a proper function to assist and give direction to project applicants in obtaining funding from such State, Federal or private financing sources as may be available to achieve the most effective utilization of resources in meeting the needs of the State. This may also include joint financing arrangements with several funding agencies to complete a total project.

(2) Hardship Grants will be evidenced by a grant agreement.

(3) In providing any form of financial assistance in the form of a loan, the Board may purchase bonds of the applicant only if the bonds are accompanied by a legal opinion of recognized municipal bond counsel to the effect that the bonds are legal and binding under applicable Utah law (including, if applicable, the Utah Municipal Bond Act). For bonds of \$150,000 or less the Board will not require this opinion.

(a) In providing any form of financial assistance in the form of a loan, the Board may purchase either a taxable or non-taxable bonds; provided that it shall be the general preference of the Board to purchase bonds issued by the applicant only if the bonds are tax exempt and are accompanied by a legal opinion of recognized municipal bond counsel to the effect that interest on the bonds is exempt from federal income taxation. Such an opinion must be obtained by the applicant in the following situations:

(i) Bonds which are issued to finance a project which will also be financed in part at any time by the proceeds of other bonds which are exempt from federal income taxation.

(ii) Bonds which are not subject to the arbitrage rebate provisions of Section 148 of the Internal Revenue Code of 1986 (or successor provision of similar intent), including, without limitation, bonds covered by the "small governmental units" exemption contained in Section 148(f)(4)(c) of the Internal Revenue Code of 1986 (or any successor provision of similar intent) and bonds which are not subject to arbitrage rebate because the gross proceeds from the loan will be completely expended within six months after the issuance of such bonds.

(b) In any other situations, the Board may purchase taxable bonds if it determines, after evaluating all relevant circumstances including the applicant's ability to pay, that the purchase of the taxable bonds is in the best interests of the State and applicant.

(c) If more than 25 percent of the project is to serve industry, bond counsel must evaluate the loan to ensure the tax exempt status of the loan fund.

(d) Revenue bonds purchased by the Board shall be secured by a pledge of water system revenues, and it is the general policy of the Board that the pledge of water revenues for the payment of debt service (principal and/or interest) on a particular revenue bond be on a parity with the pledge of those water revenues as security for the debt service payments on all other bonds or other forms of indebtedness which are secured by the water revenues.

(4) The Board will consider the financial feasibility and cost effectiveness of the project in detail. The financial capability assessment must be completed as a basis for the review. The Board may require that a full capacity

assessment be made for a given project. The Board will generally use these reports and assessments to determine whether a project will be Authorized to receive a loan, credit enhancement agreement, interest buy-down agreement, or hardship grant (Reference R309-700-9, -10 and -11). If a project is Authorized to receive a loan, the Board will establish the portion of the construction cost to be included in the loan and will set the terms for the loan. The Board will require the applicants to repay the loan as rapidly as is reasonably consistent with the financial capability of the applicant. It is the Board's intent to avoid repayment schedules which would exceed the design life of the project facilities.

(5) Normal engineering and investigation costs incurred by the Department of Environmental Quality or Board during preliminary project investigation and prior to Board Authorization will not become a charge to the applicant if the project is found infeasible, denied by the Board, or if the applicant withdraws the Application prior to the Board's Authorization. If the credit enhancement agreement or interest buy-down agreement does not involve a loan of funds from the Board, then administrative costs will not be charged to the project. However, if the project is Authorized to receive a loan or grant of funds from the Board, all costs from the beginning of the project will be charged to the project and paid by the applicant as a part of the total project cost. If the applicant decides not to build the project after the Board has Authorized the project, all costs accruing after the Authorization will be reimbursed by the applicant to the Board.

(6) The Board shall determine the date on which the scheduled payments of principal and interest will be made. In fixing this date, all possible contingencies shall be considered, and the Board may allow the system one year of actual use of the project facilities before the first repayment of principal is required.

(7) The applicant shall furnish the Board with acceptable evidence that the applicant is capable of paying its share of the construction costs during the construction period.

(8) **LOANS AND INTEREST BUY-DOWN AGREEMENTS ONLY** - The Board may require, as part of the loan or interest buy-down agreement, that any local funds which are to be used in financing the project be committed to construction prior to or concurrent with the committal of State funds.

(9) The Board will not forgive the applicant of any payment after the payment is due.

(10) The Board will require a debt service reserve account be established by the applicant at or before the loan is closed. Deposits to that account shall be made at least annually in the amount of one-tenth of the annual payment on the bond(s) purchased by the Board and shall continue until the total amount in the debt service reserve fund is equal to the annual payment. The debt service reserve account shall be continued until the bond is retired. Annual reports/statements will be required. Failure to maintain the reserve account will constitute a technical default on the bond(s) and may result in penalties being assessed. Annual reports/statements will be required.

(11) The Board will require a capital facilities replacement reserve account be established at or before the loan is closed. Deposits to that account shall be made at least annually in the amount of five percent (5%) of the applicant's annual drinking water system budget, including depreciation, unless otherwise specified by the Board at the time of loan authorization, until the loan is repaid. This fund shall not serve as security for the payment of principal or interest on the loan. The applicant shall adopt such resolutions as necessary to limit the use of the fund to construct capital

facilities for its water system and to notify the Board prior to making any disbursements from the fund so the Board can confirm that any expenditure is for an acceptable purpose. The applicant will not need the consent of the Board prior to making any expenditure from the fund. Failure to maintain the reserve account will constitute a technical default on the bond(s) and may result in penalties being assessed. Annual reports/statements will be required.

(12) If the Board is to purchase a revenue bond, the Board will require that the applicant's water rates be established such that sufficient net revenue will be raised to provide at least 125% or such other amount as the Board may determine of the total annual debt service.

R309-700-14. Committal of Funds and Approval of Agreements.

After the has issued a Plan Approval and received the appropriate legal documents and other items required by Rule R309-700, the Board will determine whether the project loan, interest buy-down, credit enhancement, and/or grant meets the conditions of its authorization. If so, the Board will give its final approval. The Executive Secretary or designee may then execute the financial assistance agreement if no aspects of the project have changed significantly since the Board's authorization of the loan or credit enhancement, provided all conditions imposed by the Board have been met. If significant changes have occurred the Board will then review the project and, if satisfied, the Board will then commit funds, approve the signing of the contract, credit enhancement agreement, interest buy-down agreement, or grant agreement, and instruct the Executive Secretary to submit a copy of the signed contract or agreement to the Division of Finance.

R309-700-15. Construction.

The Division of Drinking Water staff may conduct inspections and will report to the applicant and applicant's engineer. Contract change orders must be properly negotiated with the contractor and approved in writing. Change orders in excess of \$10,000 must receive prior written approval by the Director before execution. The applicant shall notify the Director when the project is near completion and request a final inspection. When the project is complete to the satisfaction of the applicant, the applicant's engineer, and the Director, written approval will be issued by the Director in accordance with R309-500-9 to commence using the project facilities.

KEY: loans, interest buy-downs, credit enhancements, hardship grants

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R309. Environmental Quality, Drinking Water.
R309-705. Financial Assistance: Federal Drinking Water State Revolving Fund (SRF) Loan Program.
R309-705-1. Purpose.

The purpose of this rule is to establish criteria for financial assistance to public drinking water system in accordance with a federal grant established under 42 U.S.C. 300j et seq., federal Safe Drinking Water Act (SDWA).

R309-705-2. Statutory Authority.

The authority for the Department of Environmental Quality acting through the Drinking Water Board to issue financial assistance for drinking water projects from a federal capitalization grant is provided in 42 U.S.C. 300j et seq., federal Safe Drinking Water Act, and Title 73, Chapter 10c, Utah Code.

R309-705-3. Definitions.

Definitions for general terms used in this rule are given in R309-110. Definitions for terms specific to this rule are given below.

"Board" means the Drinking Water Board.

"Drinking Water Project" means any work or facility that is necessary or desirable to provide water for human consumption and other domestic uses. Its scope includes collection, treatment, storage, and distribution facilities; and also includes studies, planning, education activities, and design work that will promote protecting the public from waterborne health risks.

"Project Costs" include the cost of acquiring and constructing any project including, without limitation: the cost of acquisition and construction of any facility or any modification, improvement, or extension of such facility; any cost incident to the acquisition of any necessary property, easement or right of way, except property condemnation cost, which are not eligible costs; engineering or architectural fees, legal fees, fiscal agents' and financial advisors' fees; any cost incurred for any preliminary planning to determine the economic and engineering feasibility of a proposed project; costs of economic investigations and studies, surveys, preparation of designs, plans, working drawings, specifications and the inspection and supervision of the construction of any facility; Hardship Grant Assessments, fees and interest accruing on loans made under this program during acquisition and construction of the project; costs for studies, planning, education activities, and design work that will promote protecting the public from waterborne health risks; and any other cost incurred by the Board or the Department of Environmental Quality, in connection with the issuance of obligation to evidence any loan made to it under the law.

"Disadvantaged Communities" are defined as those communities located in an area which has a median adjusted gross income less than or equal to 80% of the State's median adjusted gross income, as determined by the Utah State Tax Commission from federal individual income tax returns excluding zero exemption returns, or where the estimated annual cost, including loan repayment costs, of drinking water service for the average residential user exceeds 1.75% of the median adjusted gross income. If, in the judgment of the Board, the State Tax Commission data is insufficient the Board may accept other measurements of the water users' income (i.e. local income survey or questionnaire when there is a significant difference between the number of service connections for a system and the number of tax filing for a given zip code or city).

"Drinking Water Project Obligation" means any bond, note or other obligation issued to finance all or part of the cost of acquiring, constructing, expanding, upgrading or

improving a drinking water project, including, but not limited to, preliminary planning, studies, surveys, engineering or architectural fees, and preparation of plans and specifications.

"Credit Enhancement Agreement" means any agreement entered into between the Board, on behalf of the State, and an eligible water system for the purpose of providing methods and assistance to eligible water systems to improve the security for and marketability of drinking water project obligations.

"Eligible Water System" means any community drinking water system, either privately or publicly owned; and nonprofit noncommunity water systems.

"Interest Buy-Down Agreement" means any agreement entered into between the Board, on behalf of the State, and an eligible water system, for the purpose of reducing the cost of financing incurred by an eligible water system on bonds issued by the subdivision for project costs.

"Financial Assistance" means a project loan, credit enhancement agreement, interest buy-down agreement, or technical assistance.

"Hardship Grant Assessment" means an assessment applied to a loan. The assessment shall be calculated as a percentage of outstanding principal balance of a loan, applied on an annual basis. Hardship grant assessment funds shall be subject to the requirements of UAC R309-700 for hardship grants.

"Negative Interest" means a loan with an interest rate at less than zero percent. The repayment schedule for loans having a negative interest rate will be prepared by the Drinking Water Board.

"Principal Forgiveness" means a loan wherein a portion of the loan amount is "forgiven" upon closing the loan. The terms for principal forgiveness will be as directed by section 4 of this rule and by the Drinking Water Board.

"Interest" means an assessment applied to a loan. The assessment shall be calculated as a percentage of outstanding principal balance of a loan, applied on an annual basis.

"Emergency" means an unexpected, serious occurrence of situation requiring urgent or immediate action. With regard to a water system this would be a situation resulting from the failure of equipment or other infrastructure, or contamination of the water supply, which threatens the health and / or safety of the public / water users.

"Technical Assistance" means financial assistance provided for a feasibility study or master plan, to identify and / or correct system deficiencies, to help a water system overcome other technical problems. The system receiving said technical assistance may or may not be required to repay the funds received. If repayment is required, the Board will establish the terms of repayment.

"SRF Technical Assistance Fund" means a fund (or account) that will be established for the express purpose of providing "Technical Assistance" to eligible drinking water systems.

R309-705-4. Financial Assistance Methods.

(1) Eligible Activities of the SRF.

Funds within the SRF may be used for loans and other authorized forms of financial assistance. Funds may be used for the construction of publicly or privately owned works or facilities, or any work that is an eligible project cost as defined by 73-10c-2 of the Utah Code or as allowed by 42 U.S.C.A. 300f et seq. Those costs incurred subsequent to the submission of a funding application to the Board and prior to the execution of a financial assistance agreement and which meet the above criteria are eligible for reimbursement from the proceeds of the financial assistance agreement.

(2) Types of Financial Assistance Available for Eligible Water Systems.

(a) Loans.

To qualify for "negative interest" or "principal forgiveness", the system must qualify as a "disadvantaged community" as defined in section 3 of this rule. Upon application, the Board will make a case by case determination whether the system is a "disadvantaged community". To be eligible to be considered as a disadvantaged community, the system must meet the definition provided in section 3 of this rule. Additionally, the Board will consider the type of community served by the system, the economic condition of the community, the population characteristics of those served by the system, factors relating to costs, charges and operation of the water system, and other such information as the Board determines relevant to making the decision to recognize the system as a "disadvantaged community".

(i) Hardship Grant Assessment.

The assessment will be calculated based on the procedures and formulas shown in section 6 of this rule.

(ii) Repayment.

Annual repayments of principal, interest, fees and/or Hardship Grant Assessment generally commence not later than one year after project completion. Project completion shall be defined as the date the funded project is capable of operation and a notice of "beneficial occupancy" is given to the general contractor. Where a project has been phased or segmented, the repayment requirement applies to the completion of individual phases or segments.

The loan must be fully amortized not later than 20 years after project completion or not later than 30 years after project completion if the community served by the water system is determined to be a disadvantaged community. The yearly amount of the principal repayment is set at the discretion of the Board.

(iii) Principal Forgiveness.

Eligible water systems meeting the definition of "disadvantaged community" may qualify for financial assistance in the form of forgiveness of the principal loan amount. Terms for principal forgiveness will be determined by Board resolution.

Eligible applicants for "principal forgiveness" financial assistance will be considered by the Board on a case-by-case basis. The Board will consider the type of community served by the system, the economic condition of the community, the population characteristics of those served by the system, factors relating to costs, charges and operation of the water system, and such other information as the Board determines relevant to making the decision to recognize the system as a disadvantaged community.

(iv) Negative Interest Rate.

Eligible water systems meeting the definition of "disadvantaged community" may qualify for financial assistance in the form of a loan with a negative interest rate, as determined by Board resolution.

Eligible applicants for "negative interest" financial assistance will be considered by the Board on a case-by-case basis. The Board will consider the type of community served by the system, the economic condition of the community, the population characteristics of those served by the system, factors relating to costs, charges and operation of the water system, and such other information as the Board determines relevant to making the decision to recognize the system as a disadvantaged community.

(v) Dedicated Repayment Source and Security.

Loan recipients must establish one or more dedicated sources of revenue for repayment of the loan. As a condition of financial assistance, the applicant must demonstrate a revenue source and security, as required by the Board.

(b) Refinancing Existing Debt Obligations.

The Board may use funds from the SRF to buy or

refinance municipal, inter-municipal or interstate agencies, where the initial debt was incurred and construction started after July 1, 1993. Refinanced projects must comply with the requirements imposed by the Safe Drinking Water Act (SDWA) as though they were projects receiving initial financing from the SRF.

(c) Credit Enhancement Agreements and Interest Buy-Down Agreements.

The Board will determine whether a project's funding may receive all or part of a loan, credit enhancement agreement or interest buy-down agreement. To provide security for project obligations, the Board may agree to purchase project obligations of applicants, or make loans to the applicants. The Board may also consider making loans to the applicants to pay the cost of obtaining letters of credit from various financial institutions, municipal bond insurance, or other forms of insurance or security for project obligations. The Board may also consider other methods of assistance to applicants to properly enhance the marketability of or security for project obligations.

Interest buy-down agreements may consist of any of the following:

(i) A financing agreement between the Board and applicant whereby a specified sum is loaned to the applicant. The loaned funds shall be placed in a trust account, which shall be used exclusively to reduce the cost of financing for the project.

(ii) A financing agreement between the Board and the applicant whereby the proceeds of bonds purchased by the Board is combined with proceeds from publicly issued bonds to finance the project. The rate of interest on bonds purchased by the Board may carry an interest rate lower than the interest rate on the publicly issued bonds, which when blended together will provide a reduced annual debt service for the project.

(iii) Any other legal method of financing which reduces the annual payment amount on publicly issued bonds. The financing alternative chosen should be the one most economically advantageous for the State and the applicant.

(d) Technical Assistance.

The Board may establish a fund (or account) into which the proceeds of an annual fee on loans will be placed. These funds will be used to finance technical assistance for eligible water systems.

This fund will provide low interest loans for technical assistance and any other eligible purpose as defined by Section 1452 of the Safe Drinking Water Act (SDWA) Amendments of 1996 to water systems that are eligible for Federal SRF loans. Repayment of these loans may be waived in whole or in part (grant funds) by the Board whether or not the borrower is disadvantaged.

(i) The Board may establish a fee to be assessed against loans authorized under the Federal SRF Loan Program. The revenue generated by this fee will be placed in a new fund called the "SRF Technical Assistance Fund".

(ii) The amount will be assessed as a percentage of the Principal Balance of the loan on an annual basis, the same as the annual interest and hardship grant assessment are assessed. The borrower will pay the fee annually when paying the principal and interest or hardship grant assessments.

(iii) The Board may set / change the amount of the fee from time to time as they determine meets the needs of the program.

(iv) This fee will be part of the "effective rate" calculated for the loan using Table 2, R309-705-6. This fee may be charged in lieu of or in addition to the interest rate or hardship grant assessment, but in no case will the total of the technical assistance fee, the interest rate, and hardship grant

assessment exceed the "effective rate".

(v) The proceeds of the fund will be used as defined above or as modified by the Board in compliance with Section 1452 of the federal SDWA Amendments of 1996.

(3) Ineligible Projects.

Projects which are ineligible for financial assistance include:

(a) Any project for a water system in significant non-compliance, as measured by a "not approved" (R309-400) rating, unless the project will resolve all outstanding issues causing the non-compliance.

(b) Any project where the Board determines that the applicant lacks the technical, managerial, or financial capability to achieve or maintain SDWA compliance, unless the Board determines that the financial assistance will allow or cause the system to maintain long-term capability to stay in compliance.

(c) Any project meant to finance the expansion of a drinking water system to supply or attract future population growth. Eligible projects, however, can be designed and funded at a level which will serve the population that a system expects to serve over the useful life of the facility.

(d) Projects which are specifically prohibited from eligibility by Federal guidelines. These include the following:

(i) Dams, or rehabilitation of dams;

(ii) Water rights, unless the water rights are owned by a system that is being purchased through consolidation as part of a capacity development strategy;

(iii) Reservoirs, except for finished water reservoirs and those reservoirs that are part of the treatment process and are located on the property where the treatment facility is located;

(iv) Laboratory fees for monitoring;

(v) Operation and maintenance costs;

(vi) Projects needed mainly for fire protection.

R309-705-5. Application and Project Initiation Procedures.

The following procedures must normally be followed to obtain financial assistance from the Board:

(1) It is the responsibility of the applicant to obtain the necessary financial, legal and engineering counsel to prepare its application and an effective and appropriate financial assistance agreement.

(2) A completed application form and project engineering report (facility plan) listing the project alternatives considered and including a justification for the chosen alternative, a project financing plan including an evaluation of credit enhancement, interest buy-down and loan methods applicable to the project and financial capability assessment and a history of the applicant's compliance with the SDWA are submitted to the Board. Comments from other interested parties such as an association of governments, the local health and planning departments, and the Department of Environmental Quality (DEQ) District Engineers will also be accepted. Those costs incurred subsequent to the submission of a completed funding application form to the Board and prior to the execution of a financial assistance agreement and which meet the criteria for project costs are eligible for reimbursement from the proceeds of the financial assistance agreement.

(3) An engineering and financial feasibility report and a capacity development analysis are prepared by Division staff for presentation to and consideration by the Board. A Capacity Assessment will be made by Division staff (See rule R309-352) for "equivalency" projects, essentially, those funded by the annual federal Capitalization Grant as defined by federal regulations. A capacity assessment may be prepared for a "non-equivalency project when it is determined to be beneficial for evaluating project feasibility.

(4) The Board may authorize financial assistance for the project on the basis of the staff's feasibility report and designate whether a loan, credit enhancement agreement, interest buy-down agreement, or any combination thereof, is to be entered into, and approve the project schedule (see section 7 of this rule).

(5) The applicant must demonstrate public support for the project prior to bonding, as deemed acceptable by the Drinking Water Board. As a minimum, for a loan to be secured by a revenue bond, the Sponsor must mail notices to each water user in the Sponsor's service area informing them of a public hearing. In addition to the time and location of the public hearing the notice shall inform water users of the Sponsor's intent to issue a non-voted revenue bond to the Board, shall describe the face amount of the bond, the "effective rate", the repayment schedule and shall describe the impact of the project on the user including: user rates, impact and connection fees. The notice shall state that water users may respond to the Sponsor in writing or in the public hearing within ten days after the date of the notice. A copy of all written responses and a certified record of the public hearing shall be forwarded to the Division of Drinking Water.

(6) For financial assistance mechanisms where the applicant's bond is purchased by the Board, the project applicant's bond documentation must include an opinion from recognized bond counsel. Counsel must be experienced in bond matters, and must include an opinion that the drinking water project obligation is a valid and binding obligation of the applicant (see section 8 of this rule). The opinion must be submitted to the Assistant Attorney General for preliminary approval and the applicant shall publish a Notice of Intent to issue bonds in a newspaper of general circulation pursuant to 11-14-21 of the Utah Code. For financial assistance mechanisms when the applicant's bond is not purchased by the Board, the applicant shall submit a true and correct copy of an opinion from legal counsel, experienced in bond matters, that the drinking water project obligation is a valid and binding obligation of the applicant.

(7) As authorized in 19-4-106(2)(c) of the Utah Code, the Director may review plans, specifications, and other data pertinent to proposed or expanded water supply systems to insure proper design and construction, as specified in rule R309-500-4 General. Construction of a public drinking water project shall not begin until complete plans and specifications have been approved in writing by the Director.

(8) If a project is designated to be financed by the Board through a loan or an interest buy-down agreement, an account supervised by the applicant and the Board will be established by the applicant to assure that loan funds are used only for eligible project costs. If financial assistance for the project is provided by the Board in the form of a credit enhancement or interest buy-down agreement, all project funds will be maintained in a separate account, and a quarterly report of project expenditures will be provided to the Board.

Incremental disbursement bonds will be required. Cash draws will be based on a schedule that coincides with the rate at which project related costs are expected to be incurred for the project.

(9) If a revenue bond is to be used to secure a loan, a User Charge Ordinance, or water rate structure, must be submitted to the Board for review and approval to insure adequate provisions for debt retirement and/or operation and maintenance. If a general obligation bond is to be used to secure a loan, a User Charge Ordinance must be submitted to the Board for review and approval to insure the system will have adequate resources to provide acceptable service.

(10) A "Private Company" will be required to enter into a Loan Agreement with the Board. The loan agreement will establish the procedures for disbursement of loan proceeds

and will set forth the security interests to be granted to the Board by the Applicant to secure the Applicant's repayment obligations.

(a) The Board may require any of the following forms of security interest or additional/other security interests to guarantee repayment of the loan: deed of trust interests in real property, security interests in equipment and water rights, and personal guarantees.

(b) The security requirements will be established after the Board's staff has reviewed and analyzed the Applicants financial condition.

(c) These requirements may vary from project to project at the discretion of the Board

(d) The Applicant will also be required to execute a Promissory Note in the face amount of the loan, payable to the order of the lender, and file a Utah Division of Corporations and Commercial Code Financing Statement, Form UCC-1.

(e) The Board may specify that loan proceeds be disbursed incrementally into an escrow account for expected construction costs, or it may authorize another acceptable disbursement procedure.

(11) The applicant's contract with its engineer must be submitted to the Board for review to determine if there will be adequate engineering involvement, including project supervision and inspection, to successfully complete the project.

(12) The applicant's attorney must provide an opinion to the Board regarding legal incorporation of the applicant, valid legal title to rights-of-way and the project site, validity and quantity of water rights, and adequacy of bidding and contract documents, as required.

(13) A position fidelity bond may be required by the Board insuring the treasurer or other local staff handling the repayment funds and revenues produced by the applicant's system and payable to the State of Utah through the Drinking Water Board.

(14) CREDIT ENHANCEMENT AGREEMENT AND INTEREST BUY-DOWN AGREEMENT ONLY - The Board shall execute the credit enhancement agreement or interest buy-down agreement setting forth the terms and conditions of the security or other forms of assistance provided by the agreement and shall notify the applicant to sell the bonds.

(15) CREDIT ENHANCEMENT AGREEMENT AND INTEREST BUY-DOWN AGREEMENT ONLY - The applicant shall sell the bonds and shall notify the Board of the terms of sale. If a credit enhancement agreement is utilized, the bonds shall contain the legend required by 73-10c-6(3)(d) of the Utah Code. If an interest buy-down agreement is being utilized, the bonds shall bear a legend referring to the interest buy-down agreement and state that such agreement does not constitute a pledge of or charge against the general revenues, credit or taxing powers of the state and that the holder of any such bond may look only to the applicant and the funds and revenues pledged by the applicant for the payment of interest and principal on the bonds.

(16) The applicant shall open bids for the project.

(17) LOAN ONLY - The Board shall give final approval to purchase the bonds and execute the loan contract.

(18) LOAN ONLY - The closing of the loan is conducted.

(19) A preconstruction conference shall be held.

(20) The applicant shall issue a written notice to proceed to the contractor.

R309-705-6. Applicant Priority System and Selection of Terms of Assistance.

(1) Priority Determination.

The Board may, at its option, modify a project's priority

rating based on the following considerations:

(a) The project plans, specifications, contract, financing, etc., of a lesser-rated project are ready for execution.

(b) Available funding.

(c) Acute health risk.

(d) Capacity Development (financial, technical, or managerial issues needing resolution to avoid EPA intervention).

(e) An Emergency.

The Board will utilize Table 1 to prioritize loan applicants as may be modified by (a), (b), (c), or (d) above.

TABLE 1

Priority System	Points Received
Deficiency Description	
Source Quality/Quantity	
Health Risk (select one)	
A. There is evidence that waterborne illnesses have occurred.	25
B. There are reports of illnesses which may be waterborne.	20
C. High potential for waterborne illness exists.	15
D. Moderate potential for waterborne illness	8
E. No evidence of potential health risks	0
Compliance with SDWA (select all that apply)	
A. Source has been determined to be under the influence of surface water.	25
B. System is often out of water due to inadequate source capacity.	20
-or-	
System capacity does not meet the requirements of UPDWR.	10
C. Source has a history of three or more confirmed microbiological violations within the last year.	10
D. Sources are not developed or protected according to UPDWR.	10
E. Source has confirmed MCL chemistry violations within the last year.	10
Total	100
Treatment	
Points Available	
Deficiency Description	
Health Risk/Compliance with SDWA (select all that apply)	
A. Treatment system cannot consistently meet log removal requirements, turbidity standards, or other enforceable drinking water quality standards.	25
B. The required disinfection facilities are not installed, are inadequate, or fail to provide adequate water quality.	25
C. Treatment system is subject to impending failure, or has failed.	25
-or-	
Treatment system equipment does not meet demands of UPDWR including the lead and/or copper action levels.	20
-or-	
System equipment is projected to become inadequate without upgrades.	5
Total	75
Storage	
Deficiency Description	Points Available
Health Risk / Compliance with SDWA (select all that apply)	
A. Storage system is subject to impending failure, or has failed.	25
-or-	
System is old, cannot be easily cleaned, or subject to contamination.	15
B. Storage system is inadequate for existing demands.	20
-or-	
Storage system demand exceeds 90% of storage capacity.	10
C. Applicable contact time requirements cannot be met without an upgrade.	15
D. System suffers from low static pressures.	15
Total	75

Distribution	
Points	
Deficiency Description	
Available	
Health Risk/Compliance with SDWA (select all that apply)	
A. Distribution system equipment is deteriorated or inadequate for existing demands.	20
-or-	
Distribution system is inadequate to meet 5 year projected demands.	10
B. Applicable disinfectant residual maintenance requirements are not met or high backflow contamination potential exists.	20
C. Project will replace pipe containing unsafe materials (lead, asbestos, etc).	15
D. Minimum dynamic pressure requirements are not met.	10
E. System experiences a heavy leak rate in the distribution lines.	10
Total	75

Emergencies

Upon the Board finding of an emergency as required by R309-705-9. Total 100

Priority Rating = (Average Points Received) x (Rate Factor) x (AGI Factor)

Where:

* Rate Factor = (Average System Water Bill/Average State Water Bill)

** AGI Factor = (State Median AGI/System Median AGI)

(2) Financial Assistance Determination. The amount and type of financial assistance offered will be based upon the criteria shown in Table 2. As determined by Board resolution, disadvantaged communities may also receive zero-percent loans, or other financial assistance as described herein.

Effective rate calculation methods will be determined by Board resolution from time to time, using the Revenue Bond Buyer Index (RBBI) as a basis point, the points assigned in Table 2, and a method to reduce the interest rate from a recent RBBI rate down to a potential minimum of zero percent. To encourage rapid repayment of a loan the Board will increase the interest rate 0.02 per cent (0.02%) for each year the repayment period exceeds five (5.0) years.

TABLE 2
INTEREST, HARDSHIP GRANT FEE AND OTHER FEES REDUCTION FACTORS

	POINTS
1. COST EFFECTIVENESS RATIO (SELECT ONE)	
A. Project cost \$0 to \$500 per benefitting connection	16
B. \$501 to \$1,500	14
C. \$1,501 to \$2,000	11
D. \$2,001 to \$3,000	8
E. \$3,001 to \$5,000	4
F. \$5,001 to \$10,000	1
G. Over \$10,000	0
2. CURRENT LOCAL MEDIAN ADJUSTED GROSS INCOME (AGI) (SELECT ONE)	
A. Less than 70% of State Median AGI	19
B. 71 to 80% of State Median AGI	16
C. 81 to 95% of State Median AGI	13
D. 96 to 110% of State Median AGI	9
E. 111 to 130% of State Median AGI	6
F. 131 to 150% of State Median AGI	3
G. Greater than 150% of State Median AGI	0
3. APPLICANT'S COMMITMENT TO PROJECT FUNDING CONTRIBUTED BY APPLICANT (SELECT ONE)	
A. Greater than 25% of project funds	17
B. 15 to 25% of project funds	14
C. 10 to 15% of project funds	11
D. 5 to 10% of project funds	8
E. 2 to 5% of project funds	4
F. Less than 2% of project funds	0

4. ABILITY TO REPAY LOAN:

4. WATER BILL (INCLUDING TAXES) AFTER PROJECT IS BUILT RELATIVE TO LOCAL MEDIAN ADJUSTED GROSS INCOME (SELECT ONE)

A. Greater than 2.50% of local median AGI	16
B. 2.01 to 2.50% of local median AGI	12
C. 1.51 to 2.00% of local median AGI	8
D. 1.01 to 1.50% of local median AGI	3
E. 0 to 1.00% of local median AGI	0

5. SPECIAL INCENTIVES: Applicant (SELECT ALL THAT APPLY.)

A. Has a replacement fund receiving annual deposits of about 5% of the system's annual drinking water (DW) budget and fund has already accumulated a minimum of 10% of said annual DW budget in this reserve fund.	5
B. Has, in addition to item 5.A., accumulated an amount equal to at least 20% of its annual DW budget in its replacement fund.	5
C. Is creating or enhancing a regionalization plan	16
D. Has a rate structure encouraging conservation	6

TOTAL POSSIBLE POINTS FOR FINANCIAL NEED 100

R309-705-7. Project Authorization.

A project may receive written authorization for financial or technical assistance from the Board following submission and favorable review of an application form, engineering report (if required), capacity development (including financial capability) assessment and staff feasibility report. The engineering report shall include a cost effective analysis of feasible project alternatives capable of meeting State and Federal drinking water requirements. It shall include consideration of monetary costs including the present worth or equivalent annual value of all capital costs, operation, maintenance, and replacement costs. The alternative selected must be the most economical means of meeting applicable State and Federal drinking water requirements over the useful life of the facility while recognizing environmental and other nonmonetary considerations.

Once the application submittals are reviewed, the staff will prepare a project feasibility report for the Board's consideration in Authorizing a project. The project feasibility report will include an evaluation of the project with regard to the Board's funding priority criteria, and will contain recommendations for the type of financial assistance which may be extended (i.e., for a loan, credit enhancement agreement, or interest buy-down agreement).

The Board may authorize financial assistance for any work or facility to provide water for human consumption and other domestic uses. Generally, work means planning, engineering design, or other eligible activities defined elsewhere in these rules.

Project Authorization is conditioned upon the availability of funds at the time of loan closing or signing of the credit enhancement, or interest buy-down and upon adherence to the project schedule approved at that time. The Board, at its own discretion, may require the Applicant to enter into a "Commitment Agreement" with the Board prior to execution of final loan documents or closing of the loan. This Commitment Agreement or Binding Commitment may specify date(s) by which the Applicant must complete the requirements set forth in the Project Authorization Letter. The Commitment Agreement shall state that if the Department of Environmental Quality acting through the Drinking Water Board is unable to make the Loan by the Loan Date, this Agreement shall terminate without any liability accruing to the Department or the Applicant hereunder. Also, if the project does not proceed according to the project schedule, the Board may withdraw project Authorization, so that projects which are ready to proceed can obtain necessary funding. Extensions to the project schedule may be considered by the Board, but any extension requested

must be fully justified.

R309-705-8. Financial Evaluations.

(1) The Board considers it a proper function to assist project applicants in obtaining funding from such financing sources as may be available.

(2) In providing financial assistance in the form of a loan, the Board may purchase bonds of the applicant only if the bonds are accompanied by a legal opinion of recognized municipal bond counsel. Bond counsel must provide an opinion that the bonds are legal and binding under applicable Utah law (including, if applicable, the Utah Municipal Bond Act). For bonds of \$150,000 or less the Board will not require this opinion.

(3) In providing financial assistance in the form of a loan, the Board may purchase either taxable or non-taxable bonds; or a secured promissory note provided that it shall be the general preference of the Board to purchase bonds issued by the applicant only if the bonds are tax exempt. Tax-exempt bonds must be accompanied by a legal opinion of recognized municipal bond counsel to the effect that the Interest and the Hardship Grant Assessment, or a fee (also interest) on the bonds is exempt from federal income taxation. Such an opinion must be obtained by the applicant in the following situations:

(a) Bonds which are issued to finance a project which will also be financed in part at any time by the proceeds of other bonds which are exempt from federal income taxation.

(b) Bonds which are not subject to the arbitrage rebate provisions of Section 148 of the Internal Revenue Code of 1986 (or successor provision of similar intent), including, without limitation, bonds covered by the "small governmental units" exemption contained in Section 148(f)(4)(c) of the Internal Revenue Code of 1986 (or any successor provision of similar intent) and bonds which are not subject to arbitrage rebate because the gross proceeds from the loan will be completely expended within six months after the issuance of such bonds.

(4) If more than 25 percent of the project is to serve industry, bond counsel must evaluate the loan to ensure the tax exempt status of the loan fund.

(5) Revenue bonds purchased by the Board shall be secured by a pledge of water system revenues, and it is the general policy of the Board that the pledge of water revenues for the payment of debt service (principal and/or Hardship Grant Assessment) on a particular revenue bond be on a parity with the pledge of those water revenues as security for the debt service payments on all other bonds or other forms of indebtedness which are secured by the water revenues.

(6) If a project is Authorized to receive a loan, the Board will establish the portion of the construction cost to be included in the loan and will set the terms for the loan. It is the Board's intent to avoid repayment schedules exceeding the design life of the project facilities.

(7) Normal engineering and investigation costs incurred by the Department of Environmental Quality (DEQ) or Board during preliminary project investigation and prior to Board Authorization will not become a charge to the applicant if the project is found infeasible, denied by the Board, or if the applicant withdraws the Application prior to the Board's Authorization.

If the credit enhancement agreement or interest buy-down agreement does not involve a loan of funds from the Board administrative costs will not be charged to the project. However, if the Board Authorizes a loan for the project, all costs incurred by the DEQ or Board on the project will be charged against the project and paid by the applicant as a part of the total project cost. Generally, this will include all DEQ and Board costs incurred from the beginning of the

preliminary investigations through the end of construction and close-out of the project. If the applicant decides not to build the project after the Board has Authorized the project, all costs accrued after the Authorization date will be reimbursed by the applicant to the Board.

(8) The Board shall determine the date on which the scheduled payments of principal, Hardship Grant Assessment, and interest will be made. In fixing this date, all possible contingencies shall be considered, and the Board may allow the system up to one year of actual use of the project facilities before the first repayment of principal is required.

(9) The applicant shall furnish the Board with acceptable evidence that the applicant is capable of paying its share of the construction costs during the construction period.

(10) **LOANS AND INTEREST BUY-DOWN AGREEMENTS ONLY** - The Board may require, as part of the loan or interest buy-down agreement, that any local funds which are to be used in financing the project be committed to construction prior to or concurrent with the committal of State funds.

(11) The Board will not forgive the applicant of any payment after the payment is due.

(12) The Board will require that a debt service reserve account be established by the applicant at or before the time that the loan is closed. Deposits to that account shall be made at least annually in the amount of one-tenth of the annual payment on the bond(s) purchased by the Board and shall continue until the total amount in the debt service reserve fund is equal to the annual payment. The debt service reserve account shall be continued until the bond is retired. Failure to maintain the reserve account will constitute a technical default on the bond(s).

(13) The Board will require a capital facilities replacement reserve account be established at or before the loan is closed. Deposits to that account shall be made at least annually in the amount of five percent (5%) of the applicant's annual drinking water system budget, including depreciation, unless otherwise specified by the Board at the time of loan authorization, until the loan is repaid. This fund shall not serve as security for the payment of principal or Hardship Grant Assessment on the loan. The applicant shall adopt such resolutions as necessary to limit the use of the fund to construct capital facilities for its water system. The applicant will not need the consent of the Board prior to making any expenditure from the fund. Failure to maintain the reserve account will constitute a technical default on the bond(s) and may result in penalties being assessed.

(14) If the Board is to purchase a revenue bond, the Board will require that the applicant's water rates be established such that sufficient net revenue will be raised to provide at least 125% or such other amount as the Board may determine of the total annual debt service.

(15) The applicant must have adopted a Water Management and Conservation Plan prior to executing the loan agreement.

R309-705-9. Emergency Assistance.

(1) Authority: Title 73, Chapter 10c of State Statute and the SDWA Amendment of 1996 give the Board authority to provide emergency assistance to drinking water systems.

(2) Eligibility: Generally, any situation occurring as defined in Section R309-705-3 would qualify for consideration for emergency funding. However, prior to authorizing funds for an emergency, the Board may consider one or more of the various factors listed below:

(i) Was the emergency preventable? Did the utility / water system have knowledge that this emergency could be expected? If not. Should it have been aware of the potential for this problem? Did its management take reasonable action

to either prevent it or to be as prepared as reasonably possible to correct the problem when it occurred (prepared financially and technically for the event causing the problem)?

(ii) Has the utility / system established a capital improvement replacement reserve fund? Has the utility / system been charging reasonably high rates in order to establish a reserve fund to cover normal infrastructure replacement and emergencies?

(iii) Is the community a disadvantaged (hardship) community?

(iv) Is the potential for illness, injury, or other harm to the public or system operators sufficiently high that the value of providing financial assistance outweighs other factors that would preclude providing this assistance. (Even though the State does not have any legal obligation to provide financial assistance to help correct the problem.)

(3) Requirements for the Applicant: The applicant will be required to do the following as a condition of receiving financial assistance to cope with a drinking water emergency:

(i) To the extent feasible, the utility / system shall first use its own resources, e.g. capital improvement replacement fund, to correct the problem.

(ii) If the utility / system is not placing funds into a reserve fund on a regular basis and / or is charging relatively low water rates it shall be required to examine its current rate structure and policies for placing funds into a reserve account. The Board may require the utility / system to establish a reserve account and / or to revise its rate structure (increasing its rate) as a condition of the loan.

(iii) The Board may place other requirements on the utility / system.

(4) Financial Agreements, Bonding, etc: The State will work with the Applicant to help secure obligating documents. For example, the Board:

(i) Could waive the 30-day notice period, if legally possible.

(ii) Could accept a generic bond.

(iii) Could accept an unsecured loan or bond.

(5) Funding Alternatives: An Applicant may be authorized to receive a loan by any of the financial assistance methods specified in R309-705-4 for funding an emergency project. The Board may set and revise the methodology and factors to be considered when determining the terms of financial assistance it provides including assigning a priority it deems appropriate. The terms of the loan, including length of repayment period, interest or hardship grant assessment, and principal forgiveness (grant) or repayment waivers will be determined at the time the emergency funding is authorized.

(6) Funding Process - The Board must find that an emergency exists according to the criteria in R309-705-9(2). It is anticipated that under normal emergency conditions time restraints will not allow a request for emergency funding to be placed on the agenda of a regularly scheduled Board meeting or adoption and advertisement of a project priority list. Therefore, the following procedures will be followed in processing a loan application for emergency assistance:

(i) Division staff will evaluate each application for emergency funding according to the criteria listed in R309-705-9(2). Staff will solicit recommendations from the LHD and District Engineer about the proposed project to mitigate the emergency. Staff will submit a report of its findings to the Board Chairperson or designee.

(ii) The Board Chairperson or designee will arrange for a timely meeting of the Board to consider authorizing assistance for the emergency. This meeting may be conducted by telephone.

R309-705-10. Committal of Funds and Approval of Agreements.

After the Director has issued a Plan Approval, the loan, credit enhancement, interest buy-down, or hardship grant will be considered by the Board for final approval. The Board will determine whether the agreement is in proper order. The Executive Secretary, or designee, may then execute the loan or credit enhancement agreement if no aspects of the project have changed significantly since the Board's authorization of the loan or credit enhancement, provided all conditions imposed by the Board have been met. If significant changes have occurred the Board will then review the project and, if satisfied, the Board will then commit funds, approve the signing of the contract, credit enhancement agreement, or interest buy-down agreement, and instruct the Executive Secretary to submit a copy of the signed contract or agreement to the Division of Finance.

R309-705-11. Construction.

The Division of Drinking Water staff may conduct inspections and will report to the applicant and applicant's engineer. Contract change orders must be properly negotiated with the contractor and approved in writing. Change orders in excess of \$10,000 must receive prior written approval by the Executive Secretary before execution. When the project is complete to the satisfaction of the applicant, the applicant's engineer, and the Director, written approval will be issued by the Director in accordance with R309-500-9 to commence using the project facilities.

R309-705-12. Compliance with Federal Requirements.

(1) Applicants must show the legal, institutional, managerial, and financial capability to construct, operate, and maintain the drinking water system(s) that the project will serve.

(2) Applicant(s) shall require its contractors to comply with federal provisions for disadvantaged business enterprises and exclusions for businesses under suspension and/or debarment. Any bidder not complying with these requirements shall be considered a non-responsive bidder.

(3) As required by Federal Code, applicants may be subject to the following federal requirements (all assessments shall consider the impacts of the project twenty (20) years into the future):

Archeological and Historic Preservation Act of 1974, Pub. L. 86-523, as amended
 Clean Air Act, Pub. L. 84-159, as amended
 Coastal Barrier Resources Act, Pub. L. 97-348
 Coastal Zone Management Act, Pub. L. 92-583, as amended
 Endangered Species Act, Pub. L. 92-583
 Environmental Justice, Executive Order 12898
 Floodplain Management, Executive Order 11988 as amended by Executive Order 12148
 Protection of Wetlands, Executive Order 11990
 Farmland Protection Policy Act, Pub. L. 97-98
 Fish and Wildlife Coordination Act, Pub. L. 85-624
 National Environmental Policy Act of 1969 (NEPA), Pub. L. 91-190
 National Historic Preservation Act of 1966, PL 89-665, as amended
 Safe Drinking Water Act, Pub. L. 93-523, as amended
 Wild and Scenic Rivers Act, Pub. L. 90-542, as amended
 Age Discrimination Act of 1975, Pub. L. 94-135
 Title VI of the Civil Rights Act of 1964, Pub. L. 88-352
 Section 13 of the Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500 (the Clean Water Act)
 Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112 (including Executive Orders 11914 and 11250)
 The Drug-Free Workplace Act of 1988, Pub. L. 100-690 (applies only to the capitalization grant recipient)

Equal Employment Opportunity, Executive Order 11246
Women's and Minority Business Enterprise, Executive
Orders 11625, 12138 and 12432

Section 129 of the Small Business Administration
Reauthorization and Amendment Act of 1988, Pub. L. 100-
590

Anti-Lobbying Provisions (40 CFR Part 30)

Demonstration Cities and Metropolitan Development
Act of 1966, Pub. L. 89-754, as amended

Procurement Prohibitions under Section 306 of the
Clean Water Act and Section 508 of the Clean Water Act,
including Executive Order 11738, Administration of the
Clean Air Act and the Federal Water Pollution Control Act
with Respect to Federal Contracts, Grants, or Loans

Uniform Relocation and Real Property Acquisition
Policies Act, Pub. L. 91-646, as amended

Debarment and Suspension, Executive Order 12549

Accounting procedures, whereby applicants agree to
maintain a separate project account in accordance with
Generally Accepted Accounting Standards and Utah State
Uniform Accounting requirements.

KEY: SDWA, financial assistance, loans

July 1, 2011

Notice of Continuation March 13, 2015

19-4-104

73-10c

R309. Environmental Quality, Drinking Water.**R309-800. Capacity Development Program.****R309-800-1. Authority.**

(1) Under authority granted in Utah Code Subsection 19-4-104(1)(a)(v), the Drinking Water Board adopts this rule implementing the capacity development program and governing the allotment of federal funds to public water systems to assist them to comply with the Federal 1996 Reauthorized Safe Drinking Water Act (SDWA).

R309-800-2. Purpose.

(1) The SDWA makes certain federal funds available to states, through the Drinking Water State Revolving Loan Program as defined in section 1452(k)(2)(C) to provide assistance to any public water system as part of a capacity development strategy developed and implemented in accordance with section 1420(c) to ensure all new public water systems will be able to comply with the SDWA, to enhance existing public water systems' capability to comply with the SDWA, and determine which public water systems applying for financial assistance are eligible to use the State Revolving Funds.

(2) The purpose of the Capacity Development Program is to enhance and ensure the technical, managerial, and financial capacity of water systems. The Program's goals are:

- (a) to promote long-term compliance with drinking water regulations, and
- (b) to promote the public health protection objectives of the SDWA.
- (c) to promote compliance with the requirements of the State of Utah's Groundwater Rule, R309-215-16, in identifying and correcting significant deficiencies in technical, managerial, and/or financial capacity.

R309-800-3. Definitions.

(1) Definitions for terms used in this rule are given in R309-110, except as modified below.

(2) "Capacity Development" means the technical, managerial, and financial capabilities of the water system to plan for, achieve, and maintain compliance with applicable drinking water standards.

(3) "Drinking Water Region Planning" means a county wide water plan, administered locally by a coordinator, who facilitates the input of representatives of each public water system in the county with a selected consultant, to determine how each public water system will either collectively or individually comply with source protection, operator certification, monitoring including consumer confidence reports, capacity development including technical, financial and managerial aspects, environmental issues, available funding and related studies.

(4) "Small Water System" means a water system with less than 3,300 people being served.

(5) "Public Water System" means a system providing water for human consumption and other domestic uses through pipes or other constructed conveyances, which has at least 15 service connections or serves an average of at least 25 individuals daily at least 60 days out of the year.

(6) "Non-Community Water System" (NCWS) means a public water system that is not a community water system. There are two types of NCWS's: transient and non-transient.

(7) Non-Transient Non-Community Water System (NTNCWS) means a public water system that regularly serves at least 25 of the same nonresident persons per day for more than six months per year. Examples of such systems are those serving the same individuals (industrial workers, school children, church members) by means of a separate system.

(8) "New Water System" means a system that will become a community water system or non-transient, non-

community water system on or after October 1, 1999.

(9) "Required reserve" means funds set aside to meet requirements set forth in a loan covenant/bond indenture.

R309-800-4. General.

(1) Capacity development criteria are to be used as a guideline for all water systems. These criteria constitute a standard applied when reviewing new systems applications, reviewing applications for financial assistance and assessing capacity of water systems rated unapproved or in significant non-compliance with SDWA requirements or State drinking water rules by the State or the EPA.

(2) Water systems shall meet the following criteria:

(a) Technical Capacity Criteria:

(i) Finished water shall meet all drinking water standards as required by Utah State Rules;

(ii) Personnel shall operate the system in accordance with the operations and maintenance manual;

(iii) A valid water right shall be obtained;

(iv) Water system shall meet source, storage, and distribution requirements as per Utah State Rules;

(v) Water system shall not be rated unapproved or in significant noncompliance by the State or the EPA.

(b) Managerial Capacity Criteria:

(i) The system owner(s) shall be clearly identified to the Director;

(ii) The system shall meet all of the operator certification requirements as per R309-300 and backflow technician certification requirements as per R309-305.

(iii) A system or method shall be in-place to effectively maintain all requisite records, distribution system histories/maps, and compliance information; and

(iv) An operating plan shall include names and certification level of the system operator(s), facility operation and maintenance manuals, routine maintenance procedures, water quality violations response procedures, water quality monitoring plan, training plan, and emergency response plan;

(v) The Director shall be informed of management changes.

(c) Financial Capacity Criteria:

(i) Revenues shall be greater than expenses;

(ii) A financial statement compilation by a Certified Public Accountant, or an audit if otherwise required of the water system, shall be completed every three years;

(iii) The water system shall devise and implement a managerial budget and accounting process in accordance with generally accepted principals;

(iv) The operating ratio (operating revenue divided by operating expenses excluding depreciation and required reserves) shall be greater than 1.0;

(v) The coverage ratio (total revenues minus operating expenses excluding depreciation and required reserves divided by annual debt service) shall be greater than 1.0;

(vi) Customers shall be metered; and

(vii) An emergency/replacement reserve shall be created and funded.

(3) Public Water Systems that use ground water, except those that combine all of their ground water with surface water or with ground water under the direct influence of surface water prior to treatment, but including consecutive systems receiving finished ground water shall be subject to the sanitary survey requirements of R309-100-7 and the significant deficiency requirements of R309-215-16(3) in order to be in compliance with the Capacity Development Program requirements.

R309-800-5. Requirements for New Community and New Non-transient, Non-community Water Systems.

(1) Feasibility Review, (See R309-100-6).

(2) Each proposed, new water system must demonstrate that it has adequate technical, managerial, and financial capacity before it may provide water for human consumption. Proposed water systems shall submit the following for Capacity Assessment Review:

(3) Project Notification form, available on the Internet at www.drinkingwater.utah.gov/blank_forms.htm.

(4) A business plan, which includes a facilities plan, management plan, and financial plan.

(a) Facilities plan. The facilities plan shall describe the scope of the water services to be provided and shall include the following:

(i) A description of the nature and extent of the area to be served, and provisions for extending the water supply system to include additional area. The description shall include population and land use projections and forecasts of water usage;

(ii) An assessment of current and expected drinking water compliance based on monitoring data from the proposed water source;

(iii) A description of the alternatives considered, including interconnections with other existing water systems, and the reasons for selecting the method of providing water service. This description shall include the technical, managerial, financial and operational reasons for the selected method, and

(iv) An engineering description of the facilities to be constructed, including the construction phases and future phases and future plans for expansion. This description shall include an estimate of the full cost of any required construction, operation, and maintenance;

(b) Management plan. The management plan shall describe what is needed to provide for effective management and operation of the system and shall include the following:

(i) Documentation that the applicant has the legal right and authority to take the measures necessary for the construction, operation, and maintenance of the system. The documentation shall include evidence of ownership if the applicant is the owner of the system or, if the applicant is not the owner, legally enforceable management contracts or agreements;

(ii) An operating plan that describes the tasks to be performed in managing and operating the system. The operating plan shall consist of administrative and management organization charts, plans for staffing the system with certified operators, and provisions for an operations and maintenance manual; and

(iii) Documentation of credentials of management and operations personnel, cooperative agreements or service contracts including demonstration of compliance with R309-300 water system operator certification rule; and

(c) Financial plan. The financial plan shall describe the system's expected revenues, cash flow, income and issuance and repayment of debt for meeting the costs of construction, and the costs of operation and maintenance for at least five years from the date the applicant expects to begin system operation.

(5) After the information submitted by the applicant is complete, the Division of Drinking Water shall conduct a Capacity Assessment Review. The applicant shall be notified in writing whether or not the new system has demonstrated adequate capacity. No new community or non-transient, non-community system will be approved if it lacks adequate capacity.

(6) Those systems constructed without approval shall be subject to: points as specified in R309-400, and/or administrative and/or civil penalties and fines.

Assistance Under Provisions of R309-700 and R309-705.

(1) Applicants for financial assistance shall complete an application form, available on the Internet at www.drinkingwater.utah.gov/blank_forms.htm. The application shall include project information and water system financial information and will be used to determine eligibility, establish project priority ranking, and provide a basis for determining financial assistance parameters.

(2)(a) As described in (3) below, applicants for financial assistance from the Federal Drinking Water State Revolving Loan Program are required to complete and submit Capacity Development worksheets to the Executive Secretary.

(b) As described in (4) below, the Executive Secretary may require an applicant for a loan from the State's Revolving Loan Program to complete and submit Capacity Development worksheets for review.

(3) Financial assistance under the provisions of R309-705, Financial Assistance: Federal Drinking Water State Revolving Fund Loan Program. Financial assistance shall not be available to a water system that lacks the technical, managerial, or financial capability to maintain SDWA compliance, or is in significant non-compliance with any provisions of R309-200 through 225 or 500 through 550, unless:

(a) The use of the financial assistance will ensure compliance with SDWA and Utah rules; or

(b) The owner of the system agrees to undertake feasible and appropriate changes in operation to ensure technical, managerial, and financial capacity to maintain long-term compliance with SDWA.

(4) Financial assistance under the provisions of R309-700 Financial Assistance: State Drinking Water State Revolving Fund Loan Program. A Capacity Development Assessment may be necessary before the Executive Secretary considers whether a project is eligible for financial assistance under the State's Revolving Loan Program. The decision will be based on available water system information obtained through sanitary surveys, site visits, monitoring and reporting data, or other valid means. If, after review of available information, the Executive Secretary determines that a Capacity Development Assessment is necessary, he will require that the applicant complete and submit the Capacity Development worksheets to the Division. Otherwise, a Capacity Development Assessment is not required.

KEY: drinking water, funding, regionalization, capacity development

May 23, 2011

19-4-104

Notice of Continuation March 13, 2015

R309-800-6. Minimum Capacity Required for Financial

R313. Environmental Quality, Radiation Control.
R313-15. Standards for Protection Against Radiation.
R313-15-1. Purpose, Authority and Scope.

(1) Rule R313-15 establishes standards for protection against ionizing radiation resulting from activities conducted pursuant to licenses issued by the Director. These rules are issued pursuant to Subsections 19-3-104(4) and 19-3-104(8).

(2) The requirements of Rule R313-15 are designed to control the receipt, possession, use, transfer, and disposal of sources of radiation by any licensee or registrant so the total dose to an individual, including doses resulting from all sources of radiation other than background radiation, does not exceed the standards for protection against radiation prescribed in Rule R313-15. However, nothing in Rule R313-15 shall be construed as limiting actions that may be necessary to protect health and safety.

(3) Except as specifically provided in other sections of these rules, Rule R313-15 applies to persons licensed or registered by the Director to receive, possess, use, transfer, or dispose of sources of radiation. The limits in Rule R313-15 do not apply to doses due to background radiation, to exposure of patients to radiation for the purpose of medical diagnosis or therapy, to exposure from individuals administered radioactive material and released in accordance with Rule R313-32 (incorporating 10 CFR 35.75 by reference), or to exposure from voluntary participation in medical research programs.

R313-15-2. Definitions.

"Annual limit on intake" (ALI) means the derived limit for the amount of radioactive material taken into the body of an adult worker by inhalation or ingestion in a year. ALI is the smaller value of intake of a given radionuclide in a year by the reference man that would result in a committed effective dose equivalent of 0.05 Sv (5 rem) or a committed dose equivalent of 0.5 Sv (50 rem) to any individual organ or tissue. ALI values for intake by ingestion and by inhalation of selected radionuclides are given in Table I, Columns 1 and 2, of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference.

"Air-purifying respirator" means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

"Assigned protection factor" (APF) means the expected workplace level of respiratory protection that would be provided by a properly functioning respirator or a class of respirators to properly fitted and trained users. Operationally, the inhaled concentration can be estimated by dividing the ambient airborne concentration by the APF.

"Atmosphere-supplying respirator" means a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

"Class" means a classification scheme for inhaled material according to its rate of clearance from the pulmonary region of the lung. Materials are classified as D, W, or Y, which applies to a range of clearance half-times: for Class D, Days, of less than ten days, for Class W, Weeks, from ten to 100 days, and for Class Y, Years, of greater than 100 days. For purposes of these rules, "lung class" and "inhalation class" are equivalent terms.

"Constraint (dose constraint)" in accordance with 10 CFR 20.1003, (2010), means a value above which specified licensee actions are required.

"Declared pregnant woman" means a woman who has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of conception. The

declaration remains in effect until the declared pregnant woman withdraws the declaration in writing or is no longer pregnant.

"Demand respirator" means an atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.

"Derived air concentration" (DAC) means the concentration of a given radionuclide in air which, if breathed by the reference man for a working year of 2,000 hours under conditions of light work, results in an intake of one ALI. For purposes of these rules, the condition of light work is an inhalation rate of 1.2 cubic meters of air per hour for 2,000 hours in a year. DAC values are given in Table I, Column 3, of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference.

"Derived air concentration-hour" (DAC-hour) means the product of the concentration of radioactive material in air, expressed as a fraction or multiple of the derived air concentration for each radionuclide, and the time of exposure to that radionuclide, in hours. A licensee or registrant may take 2,000 DAC-hours to represent one ALI, equivalent to a committed effective dose equivalent of 0.05 Sv (5 rem).

"Disposable respirator" means a respirator for which maintenance is not intended and that is designed to be discarded after excessive breathing resistance, sorbent exhaustion, physical damage, or end-of-service-life renders it unsuitable for use. Examples of this type of respirator are a disposable half-mask respirator or a disposable escape-only self-contained breathing apparatus (SCBA).

"Dosimetry processor" means an individual or an organization that processes and evaluates individual monitoring devices in order to determine the radiation dose delivered to the monitoring devices.

"Filtering facepiece" (dust mask) means a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium, not equipped with elastomeric sealing surfaces and adjustable straps.

"Fit factor" means a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

"Fit test" means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual.

"Helmet" means a rigid respiratory inlet covering that also provides head protection against impact and penetration.

"Hood" means a respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

"Inhalation class", refer to "Class".

"Labeled package" means a package labeled with a Radioactive White I, Yellow II, or Yellow III label as specified in U.S. Department of Transportation regulations 49 CFR 172.403 and 49 CFR 172.436 through 440, (2009). Labeling of packages containing radioactive materials is required by the U.S. Department of Transportation if the amount and type of radioactive material exceeds the limits for an excepted quantity or article as defined and limited by U.S. Department of Transportation regulations 49 CFR 173.403 and 49 CFR 173.421 through 424, (2009).

"Loose-fitting facepiece" means a respiratory inlet covering that is designed to form a partial seal with the face.

"Lung class", refer to "Class".

"Nationally tracked source" is a sealed source containing a quantity equal to or greater than Category 1 or Category 2 levels of any radioactive material listed in Appendix E of 10 CFR 20.1001 to 20.2402 (2010), which is incorporated by

reference. In this context a sealed source is defined as radioactive material that is sealed in a capsule or closely bonded, in a solid form and which is not exempt from regulatory control. It does not mean material encapsulated solely for disposal, or nuclear material contained in any fuel assembly, subassembly, fuel rod, or fuel pellet. Category 1 nationally tracked sources are those containing radioactive material at a quantity equal to or greater than the Category 1 threshold. Category 2 nationally tracked sources are those containing radioactive material at a quantity equal to or greater than the Category 2 threshold but less than the Category 1 threshold.

"Negative pressure respirator" (tight fitting) means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

"Nonstochastic effect" means a health effect, the severity of which varies with the dose and for which a threshold is believed to exist. Radiation-induced cataract formation is an example of a nonstochastic effect. For purposes of these rules, "deterministic effect" is an equivalent term.

"Planned special exposure" means an infrequent exposure to radiation, separate from and in addition to the annual occupational dose limits.

"Positive pressure respirator" means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

"Powered air-purifying respirator" (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

"Pressure demand respirator" means a positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

"Qualitative fit test" (QLFT) means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

"Quantitative fit test" (QNFT) means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

"Quarter" means a period of time equal to one-fourth of the year observed by the licensee, approximately 13 consecutive weeks, providing that the beginning of the first quarter in a year coincides with the starting date of the year and that no day is omitted or duplicated in consecutive quarters.

"Reference Man" means a hypothetical aggregation of human physical and physiological characteristics determined by international consensus. These characteristics may be used by researchers and public health employees to standardize results of experiments and to relate biological insult to a common base. A description of the Reference Man is contained in the International Commission on Radiological Protection report, ICRP Publication 23, "Report of the Task Group on Reference Man."

"Respiratory protective equipment" means an apparatus, such as a respirator, used to reduce an individual's intake of airborne radioactive materials.

"Sanitary sewerage" means a system of public sewers for carrying off waste water and refuse, but excluding sewage treatment facilities, septic tanks, and leach fields owned or operated by the licensee or registrant.

"Self-contained breathing apparatus" (SCBA) means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

"Stochastic effect" means a health effect that occurs randomly and for which the probability of the effect occurring, rather than its severity, is assumed to be a linear function of dose without threshold. Hereditary effects and

cancer incidence are examples of stochastic effects. For purposes of these rules, "probabilistic effect" is an equivalent term.

"Supplied-air respirator" (SAR) or airline respirator means an atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

"Tight-fitting facepiece" means a respiratory inlet covering that forms a complete seal with the face.

"User seal check" (fit check) means an action conducted by the respirator user to determine if the respirator is properly seated to the face. Examples include negative pressure check, positive pressure check, irritant smoke check, or isoamyl acetate check.

"Very high radiation area" means an area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving an absorbed dose in excess of five Gy (500 rad) in one hour at one meter from a radiation source or one meter from any surface that the radiation penetrates.

"Weighting factor" w_T for an organ or tissue (T) means the proportion of the risk of stochastic effects resulting from irradiation of that organ or tissue to the total risk of stochastic effects when the whole body is irradiated uniformly. For calculating the effective dose equivalent, the values of w_T are:

TABLE

ORGAN DOSE WEIGHTING FACTORS

Organ or Tissue	w_T
Gonads	0.25
Breast	0.15
Red bone marrow	0.12
Lung	0.12
Thyroid	0.03
Bone surfaces	0.03
Remainder	0.30(1)
Whole Body	1.00(2)

(1) 0.30 results from 0.06 for each of five "remainder" organs, excluding the skin and the lens of the eye, that receive the highest doses.

(2) For the purpose of weighting the external whole body dose, for adding it to the internal dose, a single weighting factor, $w_T = 1.0$, has been specified. The use of other weighting factors for external exposure will be approved on a case-by-case basis until such time as specific guidance is issued.

R313-15-3. Implementation.

(1) Any existing license or registration condition that is more restrictive than Rule R313-15 remains in force until there is an amendment or renewal of the license or registration.

(2) If a license or registration condition exempts a licensee or registrant from a provision of Rule R313-15 in effect on or before January 1, 1994, it also exempts the licensee or registrant from the corresponding provision of Rule R313-15.

(3) If a license or registration condition cites provisions of Rule R313-15 in effect prior to January 1, 1994, which do not correspond to any provisions of Rule R313-15, the license or registration condition remains in force until there is an amendment or renewal of the license or registration that modifies or removes this condition.

R313-15-101. Radiation Protection Programs.

(1) Each licensee or registrant shall develop, document, and implement a radiation protection program sufficient to ensure compliance with the provisions of Rule R313-15. See Section R313-15-1102 for recordkeeping requirements relating to these programs.

(2) The licensee or registrant shall use, to the extent practical, procedures and engineering controls based upon

sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA).

(3) The licensee or registrant shall, at intervals not to exceed 12 months, review the radiation protection program content and implementation.

(4) To implement the ALARA requirements of Subsection R313-15-101(2), and notwithstanding the requirements in Section R313-15-301, a constraint on air emissions of radioactive material to the environment, excluding radon-222 and its decay products, shall be established by licensees or registrants such that the individual member of the public likely to receive the highest dose will not be expected to receive a total effective dose equivalent in excess of 0.1 mSv (0.01 rem) per year from these emissions. If a licensee or registrant subject to this requirement exceeds this dose constraint, the licensee or registrant shall report the exceedance as provided in Section R313-15-1203 and promptly take appropriate corrective action to ensure against recurrence.

R313-15-201. Occupational Dose Limits for Adults.

(1) The licensee or registrant shall control the occupational dose to individual adults, except for planned special exposures pursuant to Section R313-15-206, to the following dose limits:

- (a) An annual limit, which is the more limiting of:
 - (i) The total effective dose equivalent being equal to 0.05 Sv (5 rem); or
 - (ii) The sum of the deep dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to 0.50 Sv (50 rem).
- (b) The annual limits to the lens of the eye, to the skin of the whole body, and to the skin of the extremities which are:
 - (i) A lens dose equivalent of 0.15 Sv (15 rem), and
 - (ii) A shallow dose equivalent of 0.50 Sv (50 rem) to the skin of the whole body or to the skin of any extremity.

(2) Doses received in excess of the annual limits, including doses received during accidents, emergencies, and planned special exposures, shall be subtracted from the limits for planned special exposures that the individual may receive during the current year and during the individual's lifetime. See Subsections R313-15-206(5)(a) and R313-15-206(5)(b).

(3) When the external exposure is determined by measurement with an external personal monitoring device, the deep dose equivalent must be used in place of the effective dose equivalent, unless the effective dose equivalent is determined by a dosimetry method approved by the Director, U.S. Nuclear Regulatory Commission, or an Agreement State. The assigned deep dose equivalent must be for the part of the body receiving the highest exposure. The assigned shallow dose equivalent must be the dose averaged over the contiguous ten square centimeters of skin receiving the highest exposure.

(a) The deep dose equivalent, lens dose equivalent and shallow dose equivalent may be assessed from surveys or other radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure, or the results of individual monitoring are unavailable; or

(b) When a protective apron is worn while working with medical fluoroscopic equipment and monitoring is conducted as specified in Subsection R313-15-502(1)(d), the effective dose equivalent for external radiation shall be determined as follows:

(i) When only one individual monitoring device is used and it is located at the neck outside the protective apron, and the reported dose exceeds 25 percent of the limit specified in

Subsection R313-15-201(1), the reported deep dose equivalent value multiplied by 0.3 shall be the effective dose equivalent for external radiation; or

(ii) When individual monitoring devices are worn, both under the protective apron at the waist and outside the protective apron at the neck, the effective dose equivalent for external radiation shall be assigned the value of the sum of the deep dose equivalent reported for the individual monitoring device located at the waist under the protective apron multiplied by 1.5 and the deep dose equivalent reported for the individual monitoring device located at the neck outside the protective apron multiplied by 0.04.

(4) Derived air concentration (DAC) and annual limit on intake (ALI) values are specified in Table I of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference, and may be used to determine the individual's dose and to demonstrate compliance with the occupational dose limits. See Section R313-15-1107.

(5) Notwithstanding the annual dose limits, the licensee shall limit the soluble uranium intake by an individual to ten milligrams in a week in consideration of chemical toxicity. See footnote 3, of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference.

(6) The licensee or registrant shall reduce the dose that an individual may be allowed to receive in the current year by the amount of occupational dose received while employed by any other person. See Subsection R313-15-205(5).

R313-15-202. Compliance with Requirements for Summation of External and Internal Doses.

(1) If the licensee or registrant is required to monitor pursuant to both Subsections R313-15-502(1) and R313-15-502(2), the licensee or registrant shall demonstrate compliance with the dose limits by summing external and internal doses. If the licensee or registrant is required to monitor only pursuant to Subsection R313-15-502(1) or only pursuant to Subsection R313-15-502(2), then summation is not required to demonstrate compliance with the dose limits. The licensee or registrant may demonstrate compliance with the requirements for summation of external and internal doses pursuant to Subsections R313-15-202(2), R313-15-202(3) and R313-15-202(4). The dose equivalents for the lens of the eye, the skin, and the extremities are not included in the summation, but are subject to separate limits.

(2) Intake by Inhalation. If the only intake of radionuclides is by inhalation, the total effective dose equivalent limit is not exceeded if the sum of the deep dose equivalent divided by the total effective dose equivalent limit, and one of the following, does not exceed unity:

- (a) The sum of the fractions of the inhalation ALI for each radionuclide, or
- (b) The total number of derived air concentration-hours (DAC-hours) for all radionuclides divided by 2,000, or
- (c) The sum of the calculated committed effective dose equivalents to all significantly irradiated organs or tissues (T) calculated from bioassay data using appropriate biological models and expressed as a fraction of the annual limit. For purposes of this requirement, an organ or tissue is deemed to be significantly irradiated if, for that organ or tissue, the product of the weighting factors, w_T , and the committed dose equivalent, $H_{T,50}$, per unit intake is greater than ten percent of the maximum weighted value of $H_{T,50}$, that is, $w_T H_{T,50}$, per unit intake for any organ or tissue.

(3) Intake by Oral Ingestion. If the occupationally exposed individual receives an intake of radionuclides by oral ingestion greater than ten percent of the applicable oral ALI, the licensee or registrant shall account for this intake and include it in demonstrating compliance with the limits.

(4) Intake through Wounds or Absorption through Skin.

The licensee or registrant shall evaluate and, to the extent practical, account for intakes through wounds or skin absorption. The intake through intact skin has been included in the calculation of DAC for hydrogen-3 and does not need to be evaluated or accounted for pursuant to Subsection R313-15-202(4).

R313-15-203. Determination of External Dose from Airborne Radioactive Material.

(1) Licensees or registrants shall, when determining the dose from airborne radioactive material, include the contribution to the deep dose equivalent, lens dose equivalent, and shallow dose equivalent from external exposure to the radioactive cloud. See footnotes 1 and 2 of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference.

(2) Airborne radioactivity measurements and DAC values shall not be used as the primary means to assess the deep dose equivalent when the airborne radioactive material includes radionuclides other than noble gases or if the cloud of airborne radioactive material is not relatively uniform. The determination of the deep dose equivalent to an individual shall be based upon measurements using instruments or individual monitoring devices.

R313-15-204. Determination of Internal Exposure.

(1) For purposes of assessing dose used to determine compliance with occupational dose equivalent limits, the licensee or registrant shall, when required pursuant to Section R313-15-502, take suitable and timely measurements of:

- (a) Concentrations of radioactive materials in air in work areas; or
- (b) Quantities of radionuclides in the body; or
- (c) Quantities of radionuclides excreted from the body;

or

- (d) Combinations of these measurements.

(2) Unless respiratory protective equipment is used, as provided in Section R313-15-703, or the assessment of intake is based on bioassays, the licensee or registrant shall assume that an individual inhales radioactive material at the airborne concentration in which the individual is present.

(3) When specific information on the physical and biochemical properties of the radionuclides taken into the body or the behavior of the material in an individual is known, the licensee or registrant may:

- (a) Use that information to calculate the committed effective dose equivalent, and, if used, the licensee or registrant shall document that information in the individual's record; and
- (b) Upon prior approval of the Director, adjust the DAC or ALI values to reflect the actual physical and chemical characteristics of airborne radioactive material, for example, aerosol size distribution or density; and
- (c) Separately assess the contribution of fractional intakes of Class D, W, or Y compounds of a given radionuclide to the committed effective dose equivalent. See Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference.

(4) If the licensee or registrant chooses to assess intakes of Class Y material using the measurements given in Subsections R313-15-204(1)(b) or R313-15-204(1)(c), the licensee or registrant may delay the recording and reporting of the assessments for periods up to seven months, unless otherwise required by Section R313-15-1202 or Section R313-15-1203. This delay permits the licensee or registrant to make additional measurements basic to the assessments.

(5) If the identity and concentration of each radionuclide in a mixture are known, the fraction of the DAC applicable to the mixture for use in calculating DAC-hours shall be either:

(a) The sum of the ratios of the concentration to the appropriate DAC value, that is, D, W, or Y, from Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference, for each radionuclide in the mixture; or

(b) The ratio of the total concentration for all radionuclides in the mixture to the most restrictive DAC value for any radionuclide in the mixture.

(6) If the identity of each radionuclide in a mixture is known, but the concentration of one or more of the radionuclides in the mixture is not known, the DAC for the mixture shall be the most restrictive DAC of any radionuclide in the mixture.

(7) When a mixture of radionuclides in air exists, a licensee or registrant may disregard certain radionuclides in the mixture if:

(a) The licensee or registrant uses the total activity of the mixture in demonstrating compliance with the dose limits in Section R313-15-201 and in complying with the monitoring requirements in Subsection R313-15-502(2), and

(b) The concentration of any radionuclide disregarded is less than ten percent of its DAC, and

(c) The sum of these percentages for all of the radionuclides disregarded in the mixture does not exceed 30 percent.

(8) When determining the committed effective dose equivalent, the following information may be considered:

(a) In order to calculate the committed effective dose equivalent, the licensee or registrant may assume that the inhalation of one ALI, or an exposure of 2,000 DAC-hours, results in a committed effective dose equivalent of 0.05 Sv (5 rem) for radionuclides that have their ALIs or DACs based on the committed effective dose equivalent.

(b) For an ALI and the associated DAC determined by the nonstochastic organ dose limit of 0.50 Sv (50 rem), the intake of radionuclides that would result in a committed effective dose equivalent of 0.05 Sv (5 rem), that is, the stochastic ALI, is listed in parentheses in Table I of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference. The licensee or registrant may, as a simplifying assumption, use the stochastic ALI to determine committed effective dose equivalent. However, if the licensee or registrant uses the stochastic ALI, the licensee or registrant shall also demonstrate that the limit in Subsection R313-15-201(1)(a)(ii) is met.

R313-15-205. Determination of Prior Occupational Dose.

(1) For each individual likely to receive, in a year, an occupational dose requiring monitoring pursuant to Section R313-15-502, the licensee or registrant shall Determine the occupational radiation dose received during the current year; and

(2) Prior to permitting an individual to participate in a planned special exposure, the licensee or registrant shall determine:

(a) The internal and external doses from all previous planned special exposures; and

(b) All doses in excess of the limits, including doses received during accidents and emergencies, received during the lifetime of the individual.

(3) In complying with the requirements of Subsections R313-15-205(1) or (2), a licensee or registrant may:

(a) Accept, as a record of the occupational dose that the individual received during the current year, a written signed statement from the individual, or from the individual's most recent employer for work involving radiation exposure, that discloses the nature and the amount of any occupational dose that the individual received during the current year;

(b) Attempt to obtain the records of cumulative occupational radiation dose. A licensee or registrant may

accept, as the record of cumulative radiation dose, an up-to-date form DRC-05 or equivalent, signed by the individual and countersigned by an appropriate official of the most recent employer for work involving radiation exposure, or the individual's current employer, if the individual is not employed by the licensee or registrant; and

(c) Obtain reports of the individual's dose equivalents from the most recent employer for work involving radiation exposure, or the individual's current employer, if the individual is not employed by the licensee or registrant, by telephone, telegram, facsimile, other electronic media or letter. The licensee or registrant shall request a written verification of the dose data if the authenticity of the transmitted report cannot be established.

(4) The licensee or registrant shall record the exposure history, as required by Subsection R313-15-205(1) or (2), on form DRC-05, or other clear and legible record, of all the information required on form DRC-05. The form or record shall show each period in which the individual received occupational exposure to radiation or radioactive material and shall be signed by the individual who received the exposure. For each period for which the licensee or registrant obtains reports, the licensee or registrant shall use the dose shown in the report in preparing form DRC-05 or equivalent. For any period in which the licensee or registrant does not obtain a report, the licensee or registrant shall place a notation on form DRC-05 or equivalent indicating the periods of time for which data are not available.

(5) For the purpose of complying with this requirement, licensees or registrants are not required to reevaluate the separate external dose equivalents and internal committed dose equivalents or intakes of radionuclides assessed pursuant to the rules in Rule R313-15 in effect before January 1, 1994. Further, occupational exposure histories obtained and recorded on form DRC-05 or equivalent before January 1, 1994, would not have included effective dose equivalent, but may be used in the absence of specific information on the intake of radionuclides by the individual.

(6) If the licensee or registrant is unable to obtain a complete record of an individual's current and previously accumulated occupational dose, the licensee or registrant shall assume:

(a) In establishing administrative controls under Subsection R313-15-201(6) for the current year, that the allowable dose limit for the individual is reduced by 12.5 mSv (1.25 rem) for each quarter for which records were unavailable and the individual was engaged in activities that could have resulted in occupational radiation exposure; and

(b) That the individual is not available for planned special exposures.

(7) The licensee or registrant shall retain the records on form DRC-05 or equivalent until the Director terminates each pertinent license or registration requiring this record. The licensee or registrant shall retain records used in preparing form DRC-05 or equivalent for three years after the record is made. This includes records required under the standards for protection against radiation in effect prior to January 1, 1994.

R313-15-206. Planned Special Exposures.

A licensee or registrant may authorize an adult worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in Section R313-15-201 provided that each of the following conditions is satisfied:

(1) The licensee or registrant authorizes a planned special exposure only in an exceptional situation when alternatives that might avoid the dose estimated to result from the planned special exposure are unavailable or impractical.

(2) The licensee or registrant, and employer if the

employer is not the licensee or registrant, specifically authorizes the planned special exposure, in writing, before the exposure occurs.

(3) Before a planned special exposure, the licensee or registrant ensures that each individual involved is:

(a) Informed of the purpose of the planned operation; and

(b) Informed of the estimated doses and associated potential risks and specific radiation levels or other conditions that might be involved in performing the task; and

(c) Instructed in the measures to be taken to keep the dose ALARA considering other risks that may be present.

(4) Prior to permitting an individual to participate in a planned special exposure, the licensee or registrant ascertains prior doses as required by Subsection R313-15-205(2) during the lifetime of the individual for each individual involved.

(5) Subject to Subsection R313-15-201(2), the licensee or registrant shall not authorize a planned special exposure that would cause an individual to receive a dose from all planned special exposures and all doses in excess of the limits to exceed:

(a) The numerical values of any of the dose limits in Subsection R313-15-201(1) in any year; and

(b) Five times the annual dose limits in Subsection R313-15-201(1) during the individual's lifetime.

(6) The licensee or registrant maintains records of the conduct of a planned special exposure in accordance with Section R313-15-1106 and submits a written report in accordance with Section R313-15-1204.

(7) The licensee or registrant records the best estimate of the dose resulting from the planned special exposure in the individual's record and informs the individual, in writing, of the dose within 30 days from the date of the planned special exposure. The dose from planned special exposures shall not be considered in controlling future occupational dose of the individual pursuant to Subsection R313-15-201(1) but shall be included in evaluations required by Subsections R313-15-206(4) and R313-15-206(5).

R313-15-207. Occupational Dose Limits for Minors.

The annual occupational dose limits for minors are ten percent of the annual occupational dose limits specified for adult workers in Section R313-15-201.

R313-15-208. Dose to an Embryo/Fetus.

(1) The licensee or registrant shall ensure that the dose equivalent to the embryo/fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, does not exceed five mSv (0.5 rem). See Section R313-15-1107 for recordkeeping requirements.

(2) The licensee or registrant shall make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman so as to satisfy the limit in Subsection R313-15-208(1).

(3) The dose equivalent to an embryo/fetus is the sum of:

(a) The deep dose equivalent to the declared pregnant woman; and

(b) The dose equivalent resulting from radionuclides in the embryo/fetus and radionuclides in the declared pregnant woman.

(4) If the dose equivalent to the embryo/fetus is found to have exceeded five mSv (0.5 rem) or is within 0.5 mSv (0.05 rem) of this dose by the time the woman declares the pregnancy to the licensee or registrant, the licensee or registrant shall be deemed to be in compliance with Subsection R313-15-208(1) if the additional dose equivalent to the embryo/fetus does not exceed 0.50 mSv (0.05 rem) during the remainder of the pregnancy.

R313-15-301. Dose Limits for Individual Members of the Public.

(1) Each licensee or registrant shall conduct operations so that:

(a) The total effective dose equivalent to individual members of the public from the licensed or registered operation does not exceed one mSv (0.1 rem) in a year, exclusive of the dose contributions from background radiation, from any medical administration the individual has received, from exposure to individuals administered radioactive material and released, under Rule R313-32 (incorporating 10 CFR 35.75 by reference), from voluntary participation in medical research programs, and from the licensee's or registrant's disposal of radioactive material into sanitary sewerage in accordance with Section R313-15-1003; and

(b) The dose in any unrestricted area from external sources, exclusive of the dose contributions from patients administered radioactive material and released in accordance with Rule R313-32 (incorporating 10 CFR 35.75 by reference), does not exceed 0.02 mSv (0.002 rem) in any one hour; and

(c) Notwithstanding Subsection R313-15-301(1)(a), a licensee may permit visitors to an individual who cannot be released, under R313-32 (incorporating 10 CFR 35.75 by reference), to receive a radiation dose greater than one mSv (0.1 rem) if:

(i) The radiation dose received does not exceed five mSv (0.5 rem); and

(ii) The authorized user, as defined in R313-32, has determined before the visit that it is appropriate; and

(d) The total effective dose equivalent to individual members of the public from infrequent exposure to radiation from radiation machines does not exceed 5 mSv (0.5 rem) in a year.

(2) If the licensee or registrant permits members of the public to have access to controlled areas, the limits for members of the public continue to apply to those individuals.

(3) A licensee, registrant, or an applicant for a license or registration may apply for prior Director authorization to operate up to an annual dose limit for an individual member of the public of five mSv (0.5 rem). This application shall include the following information:

(a) Demonstration of the need for and the expected duration of operations in excess of the limit in Subsection R313-15-301(1); and

(b) The licensee's or registrant's program to assess and control dose within the five mSv (0.5 rem) annual limit; and

(c) The procedures to be followed to maintain the dose ALARA.

(4) In addition to the requirements of R313-15, a licensee subject to the provisions of the United States Environmental Protection Agency's generally applicable environmental radiation standards in 40 CFR 190 shall comply with those standards.

(5) The Director may impose additional restrictions on radiation levels in unrestricted areas and on the total quantity of radionuclides that a licensee or registrant may release in effluents in order to restrict the collective dose.

R313-15-302. Compliance with Dose Limits for Individual Members of the Public.

(1) The licensee or registrant shall make or cause to be made surveys of radiation levels in unrestricted and controlled areas and radioactive materials in effluents released to unrestricted and controlled areas to demonstrate compliance with the dose limits for individual members of the public in Section R313-15-301.

(2) A licensee or registrant shall show compliance with

the annual dose limit in Section R313-15-301 by:

(a) Demonstrating by measurement or calculation that the total effective dose equivalent to the individual likely to receive the highest dose from the licensed or registered operation does not exceed the annual dose limit; or

(b) Demonstrating that:

(i) The annual average concentrations of radioactive material released in gaseous and liquid effluents at the boundary of the unrestricted area do not exceed the values specified in Table II of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference; and

(ii) If an individual were continuously present in an unrestricted area, the dose from external sources would not exceed 0.02 mSv (0.002 rem) in an hour and 0.50 mSv (0.05 rem) in a year.

(3) Upon approval from the Director, the licensee or registrant may adjust the effluent concentration values in Appendix B, Table II of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference, for members of the public, to take into account the actual physical and chemical characteristics of the effluents, such as, aerosol size distribution, solubility, density, radioactive decay equilibrium, and chemical form.

R313-15-401. Radiological Criteria for License Termination - General Provisions.

(1) The criteria in Sections R313-15-401 through R313-15-406 apply to the decommissioning of facilities licensed under Rules R313-22 and R313-25, as well as other facilities subject to the Act. For low-level waste disposal facilities (Rule R313-25), the criteria apply only to ancillary surface facilities that support radioactive waste disposal activities.

(2) The criteria in Sections R313-15-401 through R313-15-406 do not apply to sites which:

(a) Have been decommissioned prior to the effective date of the rule in accordance with criteria approved by the Director;

(b) Have previously submitted and received Director approval on a license termination plan or decommissioning plan; or

(c) Submit a sufficient license termination plan or decommissioning plan before the effective date of the rule with criteria approved by the Director.

(3) After a site has been decommissioned and the license terminated in accordance with the criteria in Sections R313-15-401 through R313-15-406, the Director will require additional cleanup only if, based on new information, the Director determines that the criteria in Sections R313-15-401 through R313-15-406 was not met and residual radioactivity remaining at the site could result in significant threat to public health and safety.

(4) When calculating the total effective dose equivalent to the average member of the critical group, the licensee shall determine the peak annual total effective dose equivalent dose expected within the first 1000 years after decommissioning.

R313-15-402. Radiological Criteria for Unrestricted Use.

A site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a total effective dose equivalent to an average member of the critical group that does not exceed 0.25 mSv (0.025 rem) per year, including no greater than 0.04 mSv (0.004 rem) committed effective dose equivalent or total effective dose equivalent to an average member of the critical group from groundwater sources, and the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA). Determination of the levels which are ALARA must take into account consideration of any detriments, such as deaths from

transportation accidents, expected to potentially result from decontamination and waste disposal.

R313-15-403. Criteria for License Termination Under Restricted Conditions.

A site will be considered acceptable for license termination under restricted conditions if:

(1) The licensee can demonstrate that further reductions in residual radioactivity necessary to comply with the provisions of Section R313-15-402 would result in net public or environmental harm or were not being made because the residual levels associated with restricted conditions are ALARA. Determination of the levels which are ALARA must take into account consideration of any detriments, such as traffic accidents, expected to potentially result from decontamination and waste disposal; and

(2) The licensee has made provisions for legally enforceable institutional controls that provide reasonable assurance that the total effective dose equivalent from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 0.25 mSv (0.025 rem) per year; and

(3) The licensee has provided sufficient financial assurance to enable an independent third party, including a governmental custodian of a site, to assume and carry out responsibilities for any necessary control and maintenance of the site. Acceptable financial assurance mechanisms are:

(a) Funds placed into an account segregated from the licensee's assets outside the licensee's administrative control as described in Subsection R313-22-35(6)(a);

(b) Surety method, insurance, or other guarantee method as described in Subsection R313-22-35(6)(b);

(c) A statement of intent in the case of Federal, State, or local Government licensees, as described in Subsection R313-22-35(6)(d); or

(d) When a governmental entity is assuming custody and ownership of a site, an arrangement that is deemed acceptable by such governmental entity; and

(4) The licensee has submitted a decommissioning plan or license termination plan to the Director indicating the licensee's intent to decommission in accordance with Subsection R313-22-36(4) and specifying that the licensee intends to decommission by restricting use of the site. The licensee shall document in the license termination plan or decommissioning plan how the advice of individuals and institutions in the community who may be affected by the decommissioning has been sought and incorporated, as appropriate, following analysis of that advice;

(a) Licensees proposing to decommission by restricting use of the site shall seek advice from such affected parties regarding the following matters concerning the proposed decommissioning:

(i) Whether provisions for institutional controls proposed by the licensee;

(A) Will provide reasonable assurance that the total effective dose equivalent from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 0.25 mSv (0.025 rem) total effective dose equivalent per year;

(B) Will be enforceable; and

(C) Will not impose undue burdens on the local community or other affected parties; and

(ii) Whether the licensee has provided sufficient financial assurance to enable an independent third party, including a governmental custodian of a site, to assume and carry out responsibilities for any necessary control and maintenance of the site; and

(b) In seeking advice on the issues identified in Subsection R313-15-403(4)(a), the licensee shall provide for:

(i) Participation by representatives of a broad cross section of community interests who may be affected by the decommissioning;

(ii) An opportunity for a comprehensive, collective discussion on the issues by the participants represented; and

(iii) A publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement and disagreement among the participants on the issues; and

(5) Residual radioactivity at the site has been reduced so that if the institutional controls were no longer in effect, there is reasonable assurance that the total effective dose equivalent from residual radioactivity distinguishable from background to the average member of the critical group is as low as reasonably achievable and would not exceed either:

(a) one mSv (0.1 rem) per year; or

(b) five mSv (0.5 rem) per year provided the licensee:

(i) Demonstrates that further reductions in residual radioactivity necessary to comply with the one mSv (0.1 rem) per year value of Subsection R313-15-403(5)(a) are not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm;

(ii) Makes provisions for durable institutional controls; and

(iii) Provides sufficient financial assurance to enable a responsible government entity or independent third party, including a governmental custodian of a site, both to carry out periodic rechecks of the site no less frequently than every five years to assure that the institutional controls remain in place as necessary to meet the criteria of Subsection R313-15-403(2) and to assume and carry out responsibilities for any necessary control and maintenance of those controls. Acceptable financial assurance mechanisms are those in Subsection R313-15-403(3).

R313-15-404. Alternate Criteria for License Termination.

(1) The Director may terminate a license using alternative criteria greater than the dose criterion of Section R313-15-402, and Subsections R313-15-403(2) and R313-15-403(4)(a)(i)(A), if the licensee:

(a) Provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man-made sources combined, other than medical, would be more than the one mSv (0.1 rem) per year limit of Subsection R313-15-301(1)(a), by submitting an analysis of possible sources of exposure; and

(b) Has employed, to the extent practical, restrictions on site use according to the provisions of Section R313-15-403 in minimizing exposures at the site; and

(c) Reduces doses to ALARA levels, taking into consideration any detriments such as traffic accidents expected to potentially result from decontamination and waste disposal; and

(d) Has submitted a decommissioning plan or license termination plan to the Director indicating the licensee's intent to decommission in accordance with Subsection R313-22-36(4), and specifying that the licensee proposes to decommission by use of alternate criteria. The licensee shall document in the decommissioning plan or license termination plan how the advice of individuals and institutions in the community who may be affected by the decommissioning has been sought and addressed, as appropriate, following analysis of that advice. In seeking such advice, the licensee shall provide for:

(i) Participation by representatives of a broad cross section of community interests who may be affected by the decommissioning; and

(ii) An opportunity for a comprehensive, collective

discussion on the issues by the participants represented; and
 (iii) A publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement and disagreement among the participants on the issues.

(2) The use of alternate criteria to terminate a license requires the approval of the Director after consideration of recommendations from the Division's staff, comments provided by federal, state and local governments, and any public comments submitted pursuant to Section R313-15-405.

R313-15-405. Public Notification and Public Participation.

Upon the receipt of a license termination plan or decommissioning plan from the licensee, or a proposal by the licensee for release of a site pursuant to Sections R313-15-403 or R313-15-404, or whenever the Director deems such notice to be in the public interest, the Director shall:

(1) Notify and solicit comments from:

(a) Local and State governments in the vicinity of the site and any Indian Nation or other indigenous people that have treaty or statutory rights that could be affected by the decommissioning; and

(b) Federal, state and local governments for cases where the licensee proposes to release a site pursuant to Section R313-15-404.

(2) Publish a notice in a forum, such as local newspapers, letters to State or local organizations, or other appropriate forum, that is readily accessible to individuals in the vicinity of the site, and solicit comments from affected parties.

R313-15-406. Minimization of Contamination.

Applicants for licenses, other than renewals, shall describe in the application how facility design and procedures for operation will minimize, to the extent practicable, contamination of the facility and the environment, facilitate eventual decommissioning, and minimize, to the extent practicable, the generation of waste.

R313-15-501. Surveys and Monitoring - General.

(1) Each licensee or registrant shall make, or cause to be made, surveys that:

(a) Are necessary for the licensee or registrant to comply with Rule R313-15; and

(b) Are necessary under the circumstances to evaluate:

(i) The magnitude and the extent of radiation levels; and

(ii) Concentrations or quantities of radioactive material; and

(iii) The potential radiological hazards.

(2) The licensee or registrant shall ensure that instruments and equipment used for quantitative radiation measurements, for example, dose rate and effluent monitoring, are calibrated at intervals not to exceed 12 months for the radiation measured, except when a more frequent interval is specified in another applicable part of these rules or a license condition.

(3) All personnel dosimeters, except for direct and indirect reading pocket ionization chambers and those dosimeters used to measure the dose to any extremity, that require processing to determine the radiation dose and that are used by licensees and registrants to comply with Section R313-15-201, with other applicable provisions of these rules, or with conditions specified in a license or registration shall be processed and evaluated by a dosimetry processor:

(a) Holding current personnel dosimetry accreditation from the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Institute of Standards and

Technology; and

(b) Approved in this accreditation process for the type of radiation or radiations included in the NVLAP program that most closely approximates the type of radiation or radiations for which the individual wearing the dosimeter is monitored.

(4) The licensee or registrant shall ensure that adequate precautions are taken to prevent a deceptive exposure of an individual monitoring device.

R313-15-502. Conditions Requiring Individual Monitoring of External and Internal Occupational Dose.

Each licensee or registrant shall monitor exposures from sources of radiation at levels sufficient to demonstrate compliance with the occupational dose limits of Rule R313-15. As a minimum:

(1) Each licensee or registrant shall monitor occupational exposure to radiation from licensed, unlicensed, and registered radiation sources under the control of the licensee and shall supply and require the use of individual monitoring devices by:

(a) Adults likely to receive, in one year from sources external to the body, a dose in excess of ten percent of the limits in Subsection R313-15-201(1); and

(b) Minors likely to receive, in one year, from radiation sources external to the body, a deep dose equivalent in excess of one mSv (0.1 rem), a lens dose equivalent in excess of 1.5 mSv (0.15 rem), or a shallow dose equivalent to the skin or to the extremities in excess of five mSv (0.5 rem); and

(c) Declared pregnant women likely to receive during the entire pregnancy, from radiation sources external to the body, a deep dose equivalent in excess of one mSv (0.1 rem); and

(d) Individuals entering a high or very high radiation area; and

(e) Individuals working with medical fluoroscopic equipment.

(i) An individual monitoring device used for the dose to an embryo/fetus of a declared pregnant woman, pursuant to Subsection R313-15-208(1), shall be located under the protective apron at the waist.

(A) If an individual monitoring device worn by a declared pregnant woman has a monthly reported dose equivalent value in excess of 0.5 mSv (50 mrem), the value to be used for determining the dose to the embryo/fetus, pursuant to Subsection R313-15-208(3)(a) for radiation from medical fluoroscopy, may be the value reported by the individual monitoring device worn at the waist underneath the protective apron which has been corrected for the potential overestimation of dose recorded by the monitoring device because of the overlying tissue of the pregnant individual. This correction shall be performed by a radiation safety officer of an institutional radiation safety committee, a qualified expert approved by the Director.

(ii) An individual monitoring device used for lens dose equivalent shall be located at the neck, or an unshielded location closer to the eye, outside the protective apron.

(iii) When only one individual monitoring device is used to determine the effective dose equivalent for external radiation pursuant to Subsection R313-15-201(3)(b), it shall be located at the neck outside the protective apron. When a second individual monitoring device is used, for the same purpose, it shall be located under the protective apron at the waist. Note: The second individual monitoring device is required for a declared pregnant woman.

(iv) A registrant is not required to supply and require the use of individual monitoring devices provided the registrant has conducted a survey, pursuant to Section R313-15-501, that demonstrates that the working environment the individual encounters will not likely result in a dose in excess

of ten percent of the limits in Subsection R313-15-201(1), and that the individual is neither a minor nor a declared pregnant woman.

(2) Each licensee or registrant shall monitor, to determine compliance with Section R313-15-204, the occupational intake of radioactive material by and assess the committed effective dose equivalent to:

(a) Adults likely to receive, in one year, an intake in excess of ten percent of the applicable ALI(s) in Table I, Columns 1 and 2, of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference; and

(b) Minors likely to receive, in one year, a committed effective dose equivalent in excess of one mSv (0.1 rem); and

(c) Declared pregnant women likely to receive, during the entire pregnancy, a committed effective dose equivalent in excess of one mSv (0.1 rem).

Note: All of the occupational doses in Section R313-15-201 continue to be applicable to the declared pregnant worker as long as the embryo/fetus dose limit is not exceeded.

R313-15-503. Location of Individual Monitoring Devices.

Each licensee or registrant shall ensure that individuals who are required to monitor occupational doses in accordance with Subsection R313-15-502(1) wear individual monitoring devices as follows:

(1) An individual monitoring device used for monitoring the dose to the whole body shall be worn at the unshielded location of the whole body likely to receive the highest exposure. When a protective apron is worn, the location of the individual monitoring device is typically at the neck (collar).

(2) An individual monitoring device used for monitoring the dose to an embryo/fetus of a declared pregnant woman, pursuant to Subsection R313-15-208(1), shall be located at the waist under any protective apron being worn by the woman.

(3) An individual monitoring device used for monitoring the lens dose equivalent, to demonstrate compliance with Subsection R313-15-201(1)(b)(i), shall be located at the neck (collar), outside any protective apron being worn by the monitored individual, or at an unshielded location closer to the eye.

(4) An individual monitoring device used for monitoring the dose to the extremities, to demonstrate compliance with Subsection R313-15-201(1)(b)(ii), shall be worn on the extremity likely to receive the highest exposure. Each individual monitoring device shall be oriented to measure the highest dose to the extremity being monitored.

R313-15-601. Control of Access to High Radiation Areas.

(1) The licensee or registrant shall ensure that each entrance or access point to a high radiation area has one or more of the following features:

(a) A control device that, upon entry into the area, causes the level of radiation to be reduced below that level at which an individual might receive a deep dose equivalent of one mSv (0.1 rem) in one hour at 30 centimeters from the source of radiation or from any surface that the radiation penetrates; or

(b) A control device that energizes a conspicuous visible or audible alarm signal so that the individual entering the high radiation area and the supervisor of the activity are made aware of the entry; or

(c) Entryways that are locked, except during periods when access to the areas is required, with positive control over each individual entry.

(2) In place of the controls required by Subsection R313-15-601(1) for a high radiation area, the licensee or registrant may substitute continuous direct or electronic

surveillance that is capable of preventing unauthorized entry.

(3) The licensee or registrant may apply to the Director for approval of alternative methods for controlling access to high radiation areas.

(4) The licensee or registrant shall establish the controls required by Subsections R313-15-601(1) and R313-15-601(3) in a way that does not prevent individuals from leaving a high radiation area.

(5) The licensee or registrant is not required to control each entrance or access point to a room or other area that is a high radiation area solely because of the presence of radioactive materials prepared for transport and packaged and labeled in accordance with the rules of the U.S. Department of Transportation provided that:

(a) The packages do not remain in the area longer than three days; and

(b) The dose rate at one meter from the external surface of any package does not exceed 0.1 mSv (0.01 rem) per hour.

(6) The licensee or registrant is not required to control entrance or access to rooms or other areas in hospitals solely because of the presence of patients containing radioactive material, provided that there are personnel in attendance who are taking the necessary precautions to prevent the exposure of individuals to radiation or radioactive material in excess of the established limits in Rule R313-15 and to operate within the ALARA provisions of the licensee's or registrant's radiation protection program.

(7) The registrant is not required to control entrance or access to rooms or other areas containing sources of radiation capable of producing a high radiation area as described in Section R313-15-601 if the registrant has met all the specific requirements for access and control specified in other applicable sections of these rules, such as, Rule R313-36 for industrial radiography, Rule R313-28 for x rays in the healing arts, Rule R313-30 for therapeutic radiation machines, and Rule R313-35 for industrial use of x-ray systems.

R313-15-602. Control of Access to Very High Radiation Areas.

(1) In addition to the requirements in Section R313-15-601, the licensee or registrant shall institute measures to ensure that an individual is not able to gain unauthorized or inadvertent access to areas in which radiation levels could be encountered at five Gy (500 rad) or more in one hour at one meter from a source of radiation or any surface through which the radiation penetrates. This requirement does not apply to rooms or areas in which diagnostic x-ray systems are the only source of radiation, or to non-self-shielded irradiators.

(2) The registrant is not required to control entrance or access to rooms or other areas containing sources of radiation capable of producing a very high radiation area as described in Subsection R313-15-602(1) if the registrant has met all the specific requirements for access and control specified in other applicable sections of these rules, such as, Rule R313-36 for industrial radiography, Rule R313-28 for x rays in the healing arts, Rule R313-30 for therapeutic radiation machines, and Rule R313-35 for industrial use of x-ray systems.

R313-15-603. Control of Access to Very High Radiation Areas -- Irradiators.

(1) Section R313-15-603 applies to licensees or registrants with sources of radiation in non-self-shielded irradiators. Section R313-15-603 does not apply to sources of radiation that are used in teletherapy, in industrial radiography, or in completely self-shielded irradiators in which the source of radiation is both stored and operated within the same shielding radiation barrier and, in the designed configuration of the irradiator, is always physically inaccessible to any individual and cannot create a high levels

of radiation in an area that is accessible to any individual.

(2) Each area in which there may exist radiation levels in excess of five Gy (500 rad) in one hour at one meter from a source of radiation that is used to irradiate materials shall meet the following requirements:

(a) Each entrance or access point shall be equipped with entry control devices which:

(i) Function automatically to prevent any individual from inadvertently entering a very high radiation area; and

(ii) Permit deliberate entry into the area only after a control device is actuated that causes the radiation level within the area, from the source of radiation, to be reduced below that at which it would be possible for an individual to receive a deep dose equivalent in excess of one mSv (0.1 rem) in one hour; and

(iii) Prevent operation of the source of radiation if it would produce radiation levels in the area that could result in a deep dose equivalent to an individual in excess of one mSv (0.1 rem) in one hour.

(b) Additional control devices shall be provided so that, upon failure of the entry control devices to function as required by Subsection R313-15-603(2)(a):

(i) The radiation level within the area, from the source of radiation, is reduced below that at which it would be possible for an individual to receive a deep dose equivalent in excess of one mSv (0.1 rem) in one hour; and

(ii) Conspicuous visible and audible alarm signals are generated to make an individual attempting to enter the area aware of the hazard and at least one other authorized individual, who is physically present, familiar with the activity, and prepared to render or summon assistance, aware of the failure of the entry control devices.

(c) The licensee or registrant shall provide control devices so that, upon failure or removal of physical radiation barriers other than the sealed source's shielded storage container:

(i) The radiation level from the source of radiation is reduced below that at which it would be possible for an individual to receive a deep dose equivalent in excess of one mSv (0.1 rem) in one hour; and

(ii) Conspicuous visible and audible alarm signals are generated to make potentially affected individuals aware of the hazard and the licensee or registrant or at least one other individual, who is familiar with the activity and prepared to render or summon assistance, aware of the failure or removal of the physical barrier.

(d) When the shield for stored sealed sources is a liquid, the licensee or registrant shall provide means to monitor the integrity of the shield and to signal, automatically, loss of adequate shielding.

(e) Physical radiation barriers that comprise permanent structural components, such as walls, that have no credible probability of failure or removal in ordinary circumstances need not meet the requirements of Subsections R313-15-603(2)(c) and R313-15-603(2)(d).

(f) Each area shall be equipped with devices that will automatically generate conspicuous visible and audible alarm signals to alert personnel in the area before the source of radiation can be put into operation and in time for any individual in the area to operate a clearly identified control device, which shall be installed in the area and which can prevent the source of radiation from being put into operation.

(g) Each area shall be controlled by use of such administrative procedures and such devices as are necessary to ensure that the area is cleared of personnel prior to each use of the source of radiation.

(h) Each area shall be checked by a radiation measurement to ensure that, prior to the first individual's entry into the area after any use of the source of radiation, the

radiation level from the source of radiation in the area is below that at which it would be possible for an individual to receive a deep dose equivalent in excess of one mSv (0.1 rem) in one hour.

(i) The entry control devices required in Subsection R313-15-603(2)(a) shall be tested for proper functioning. See Section R313-15-1110 for recordkeeping requirements.

(i) Testing shall be conducted prior to initial operation with the source of radiation on any day, unless operations were continued uninterrupted from the previous day; and

(ii) Testing shall be conducted prior to resumption of operation of the source of radiation after any unintentional interruption; and

(iii) The licensee or registrant shall submit and adhere to a schedule for periodic tests of the entry control and warning systems.

(j) The licensee or registrant shall not conduct operations, other than those necessary to place the source of radiation in safe condition or to effect repairs on controls, unless control devices are functioning properly.

(k) Entry and exit portals that are used in transporting materials to and from the irradiation area, and that are not intended for use by individuals, shall be controlled by such devices and administrative procedures as are necessary to physically protect and warn against inadvertent entry by any individual through these portals. Exit portals for irradiated materials shall be equipped to detect and signal the presence of any loose radioactive material that is carried toward such an exit and automatically to prevent loose radioactive material from being carried out of the area.

(3) Licensees, registrants, or applicants for licenses or registrations for sources of radiation within the purview of Subsection R313-15-603(2) which will be used in a variety of positions or in locations, such as open fields or forests, that make it impractical to comply with certain requirements of Subsection R313-15-603(2), such as those for the automatic control of radiation levels, may apply to the Director for approval of alternative safety measures. Alternative safety measures shall provide personnel protection at least equivalent to those specified in Subsection R313-15-603(2). At least one of the alternative measures shall include an entry-preventing interlock control based on a measurement of the radiation that ensures the absence of high radiation levels before an individual can gain access to the area where such sources of radiation are used.

(4) The entry control devices required by Subsections R313-15-603(2) and R313-15-603(3) shall be established in such a way that no individual will be prevented from leaving the area.

R313-15-701. Use of Process or Other Engineering Controls.

The licensee or registrant shall use, to the extent practical, process or other engineering controls, such as, containment, decontamination, or ventilation, to control the concentration of radioactive material in air.

R313-15-702. Use of Other Controls.

(1) When it is not practical to apply process or other engineering controls to control the concentration of radioactive material in the air to values below those that define an airborne radioactivity area, the licensee or registrant shall, consistent with maintaining the total effective dose equivalent ALARA, increase monitoring and limit intakes by one or more of the following means:

(a) Control of access; or

(b) Limitation of exposure times; or

(c) Use of respiratory protection equipment; or

(d) Other controls.

(2) If the licensee or registrant performs an ALARA analysis to determine whether or not respirators should be used, the licensee may consider safety factors other than radiological factors. The licensee or registrant should also consider the impact of respirator use on workers' industrial health and safety.

R313-15-703. Use of Individual Respiratory Protection Equipment.

If the licensee or registrant uses respiratory protection equipment to limit the intake of radioactive material:

(1) Except as provided in Subsection R313-15-703(2), the licensee or registrant shall use only respiratory protection equipment that is tested and certified by the National Institute for Occupational Safety and Health.

(2) The licensee or registrant may use equipment that has not been tested or certified by the National Institute for Occupational Safety and Health or for which there is no schedule for testing or certification, provided the licensee or registrant has submitted to the Director and the Director has approved an application for authorized use of that equipment. The application must include a demonstration by testing, or a demonstration on the basis of reliable test information, that the material and performance characteristics of the equipment are capable of providing the proposed degree of protection under anticipated conditions of use.

(3) The licensee or registrant shall implement and maintain a respiratory protection program that includes:

- (a) Air sampling sufficient to identify the potential hazard, permit proper equipment selection, and estimate doses; and
- (b) Surveys and bioassays, as necessary, to evaluate actual intakes; and
- (c) Testing of respirators for operability, user seal check for face sealing devices and functional check for others, immediately prior to each use; and
- (d) Written procedures regarding
 - (i) Monitoring, including air sampling and bioassays;
 - (ii) Supervision and training of respirator users;
 - (iii) Fit testing;
 - (iv) Respirator selection;
 - (v) Breathing air quality;
 - (vi) Inventory and control;
 - (vii) Storage, issuance, maintenance, repair, testing, and quality assurance of respiratory protection equipment;
 - (viii) Recordkeeping; and
 - (ix) Limitations on periods of respirator use and relief from respirator use; and
- (e) Determination by a physician prior to initial fitting of respirators, before the first field use of non-face sealing respirators, and either every 12 months thereafter or periodically at a frequency determined by a physician, that the individual user is medically fit to use the respiratory protection equipment; and
- (f) Fit testing, with fit factor greater than or equal to ten times the APF for negative pressure devices, and a fit factor greater than or equal to 500 for positive pressure, continuous flow, and pressure-demand devices, before the first field use of tight fitting, face-sealing respirators and periodically thereafter at a frequency not to exceed one year. Fit testing must be performed with the facepiece operating in the negative pressure mode.

(4) The licensee or registrant shall advise each respirator user that the user may leave the area at any time for relief from respirator use in the event of equipment malfunction, physical or psychological distress, procedural or communication failure, significant deterioration of operating conditions, or any other conditions that might require such relief.

(5) The licensee or registrant shall also consider limitations appropriate to the type and mode of use. When selecting respiratory devices the licensee shall provide for vision correction, adequate communication, low temperature work environments, and the concurrent use of other safety or radiological protection equipment. The licensee or registrant shall use equipment in such a way as not to interfere with the proper operation of the respirator.

(6) Standby rescue persons are required whenever one-piece atmosphere-supplying suits, or any combination of supplied air respiratory protection device and personnel protective equipment are used from which an unaided individual would have difficulty extricating himself or herself. The standby persons must be equipped with respiratory protection devices or other apparatus appropriate for the potential hazards. The standby rescue persons shall observe or otherwise maintain continuous communication with the workers (visual, voice, signal line, telephone, radio, or other suitable means), and be immediately available to assist them in case of a failure of the air supply or for any other reason that requires relief from distress. A sufficient number of standby rescue persons must be immediately available to assist all users of this type of equipment and to provide effective emergency rescue if needed.

(7) Atmosphere-supplying respirators must be supplied with respirable air of grade D quality or better as defined by the Compressed Gas Association in publication G-7.1, "Commodity Specification for Air," 1997 ed. and included in 29 CFR 1910.134(i)(1)(ii)(A) through (E), (2010). Grade D quality air criteria include:

- (a) Oxygen content (v/v) of 19.5 to 23.5%;
- (b) Hydrocarbon (condensed) content of five milligrams per cubic meter of air or less;
- (c) Carbon monoxide (CO) content of ten ppm or less;
- (d) Carbon dioxide content of 1,000 ppm or less; and
- (e) Lack of noticeable odor.

(8) The licensee shall ensure that no objects, materials or substances, such as facial hair, or any conditions that interfere with the face and facepiece seal or valve function, and that are under the control of the respirator wearer, are present between the skin of the wearer's face and the sealing surface of a tight-fitting respirator facepiece.

(9) In estimating the dose to individuals from intake of airborne radioactive materials, the concentration of radioactive material in the air that is inhaled when respirators are worn is initially assumed to be the ambient concentration in air without respiratory protection, divided by the assigned protection factor. If the dose is later found to be greater than the estimated dose, the corrected value must be used. If the dose is later found to be less than the estimated dose, the corrected value may be used.

R313-15-704. Further Restrictions on the Use of Respiratory Protection Equipment.

The Director may impose restrictions in addition to the provisions of Section R313-15-702, Section R313-15-703, and Appendix A of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference to:

(1) Ensure that the respiratory protection program of the licensee or registrant is adequate to limit doses to individuals from intakes of airborne radioactive materials consistent with maintaining total effective dose equivalent ALARA; and

(2) Limit the extent to which a licensee or registrant may use respiratory protection equipment instead of process or other engineering controls.

R313-15-705. Application for Use of Higher Assigned Protection Factors.

The licensee or registrant shall obtain authorization from

the Director before using assigned protection factors in excess of those specified in Appendix A of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference. The Director may authorize a licensee or registrant to use higher assigned protection factors on receipt of an application that:

- (1) Describes the situation for which a need exists for higher protection factors; and
- (2) Demonstrates that the respiratory protection equipment provides these higher protection factors under the proposed conditions of use.

R313-15-801. Security and Control of Licensed or Registered Sources of Radiation.

- (1) The licensee or registrant shall secure licensed or registered radioactive material from unauthorized removal or access.
- (2) The licensee or registrant shall maintain constant surveillance, and use devices or administrative procedures to prevent unauthorized use of licensed or registered radioactive material that is in an unrestricted area and that is not in storage.
- (3) The registrant shall secure registered radiation machines from unauthorized removal.
- (4) The registrant shall use devices or administrative procedures to prevent unauthorized use of registered radiation machines.

R313-15-901. Caution Signs.

- (1) Standard Radiation Symbol. Unless otherwise authorized by the Director, the symbol prescribed by 10 CFR 20.1901, (2010), which is incorporated by reference, shall use the colors magenta, or purple, or black on yellow background. The symbol prescribed is the three-bladed design as follows:
 - (a) Cross-hatched area is to be magenta, or purple, or black, and
 - (b) The background is to be yellow.
- (2) Exception to Color Requirements for Standard Radiation Symbol. Notwithstanding the requirements of 10 CFR 20.1901(a), (2010), which is incorporated by reference, licensees or registrants are authorized to label sources, source holders, or device components containing sources of radiation that are subjected to high temperatures, with conspicuously etched or stamped radiation caution symbols and without a color requirement.
- (3) Additional Information on Signs and Labels. In addition to the contents of signs and labels prescribed in Rule R313-15, the licensee or registrant shall provide, on or near the required signs and labels, additional information, as appropriate, to make individuals aware of potential radiation exposures and to minimize the exposures.

R313-15-902. Posting Requirements.

- (1) Posting of Radiation Areas. The licensee or registrant shall post each radiation area with a conspicuous sign or signs bearing the radiation symbol and the words "CAUTION, RADIATION AREA."
- (2) Posting of High Radiation Areas. The licensee or registrant shall post each high radiation area with a conspicuous sign or signs bearing the radiation symbol and the words "CAUTION, HIGH RADIATION AREA" or "DANGER, HIGH RADIATION AREA."
- (3) Posting of Very High Radiation Areas. The licensee or registrant shall post each very high radiation area with a conspicuous sign or signs bearing the radiation symbol and words "GRAVE DANGER, VERY HIGH RADIATION AREA."
- (4) Posting of Airborne Radioactivity Areas. The licensee or registrant shall post each airborne radioactivity area with a conspicuous sign or signs bearing the radiation

symbol and the words "CAUTION, AIRBORNE RADIOACTIVITY AREA" or "DANGER, AIRBORNE RADIOACTIVITY AREA."

- (5) Posting of Areas or Rooms in which Licensed or Registered Material is Used or Stored. The licensee or registrant shall post each area or room in which there is used or stored an amount of licensed or registered material exceeding ten times the quantity of such material specified in Appendix C of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference, with a conspicuous sign or signs bearing the radiation symbol and the words "CAUTION, RADIOACTIVE MATERIAL" or "DANGER, RADIOACTIVE MATERIAL."

R313-15-903. Exceptions to Posting Requirements.

- (1) A licensee or registrant is not required to post caution signs in areas or rooms containing sources of radiation for periods of less than eight hours, if each of the following conditions is met:
 - (a) The sources of radiation are constantly attended during these periods by an individual who takes the precautions necessary to prevent the exposure of individuals to sources of radiation in excess of the limits established in Rule R313-15; and
 - (b) The area or room is subject to the licensee's or registrant's control.
- (2) Rooms or other areas in hospitals that are occupied by patients are not required to be posted with caution signs pursuant to Section R313-15-902 provided that the patient could be released from licensee control pursuant to Rule R313-32.
- (3) A room or area is not required to be posted with a caution sign because of the presence of a sealed source provided the radiation level at 30 centimeters from the surface of the sealed source container or housing does not exceed 0.05 mSv (0.005 rem) per hour.
- (4) A room or area is not required to be posted with a caution sign because of the presence of radiation machines used solely for diagnosis in the healing arts.
- (5) Rooms in hospitals or clinics that are used for teletherapy are exempt from the requirement to post caution signs under Section R313-15-902 if:
 - (a) Access to the room is controlled pursuant to Section R313-32; and
 - (b) Personnel in attendance take necessary precautions to prevent the inadvertent exposure of workers, other patients, and members of the public to radiation in excess of the limits established in Rule R313-15.

R313-15-904. Labeling Containers and Radiation Machines.

- (1) The licensee or registrant shall ensure that each container of licensed or registered material bears a durable, clearly visible label bearing the radiation symbol and the words "CAUTION, RADIOACTIVE MATERIAL" or "DANGER, RADIOACTIVE MATERIAL." The label shall also provide information, such as the radionuclides present, an estimate of the quantity of radioactivity, the date for which the activity is estimated, radiation levels, kinds of materials, and mass enrichment, to permit individuals handling or using the containers, or working in the vicinity of the containers, to take precautions to avoid or minimize exposures.
- (2) Each licensee or registrant shall, prior to removal or disposal of empty uncontaminated containers to unrestricted areas, remove or deface the radioactive material label or otherwise clearly indicate that the container no longer contains radioactive materials.
- (3) Each registrant shall ensure that each radiation machine is labeled in a conspicuous manner which cautions

individuals that radiation is produced when it is energized.

R313-15-905. Exemptions to Labeling Requirements.

A licensee or registrant is not required to label:

(1) Containers holding licensed or registered material in quantities less than the quantities listed in Appendix C of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference; or

(2) Containers holding licensed or registered material in concentrations less than those specified in Table III of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference; or

(3) Containers attended by an individual who takes the precautions necessary to prevent the exposure of individuals in excess of the limits established by Rule R313-15; or

(4) Containers when they are in transport and packaged and labeled in accordance with the rules of the U.S. Department of Transportation; or

(5) Containers that are accessible only to individuals authorized to handle or use them, or to work in the vicinity of the containers, if the contents are identified to these individuals by a readily available written record. Examples of containers of this type are containers in locations such as water-filled canals, storage vaults, or hot cells. The record shall be retained as long as the containers are in use for the purpose indicated on the record; or

(6) Installed manufacturing or process equipment, such as piping and tanks.

R313-15-906. Procedures for Receiving and Opening Packages.

(1) Each licensee or registrant who expects to receive a package containing quantities of radioactive material in excess of a Type A quantity, as used in Section R313-19-100, which incorporates 10 CFR 71.4 by reference, shall make arrangements to receive:

(a) The package when the carrier offers it for delivery; or

(b) The notification of the arrival of the package at the carrier's terminal and to take possession of the package expeditiously.

(2) Each licensee or registrant shall:

(a) Monitor the external surfaces of a labeled package for radioactive contamination unless the package contains only radioactive material in the form of gas or in special form as defined in Section R313-12-3; and

(b) Monitor the external surfaces of a labeled package for radiation levels unless the package contains quantities of radioactive material that are less than or equal to the Type A quantity, as used in Section R313-19-100, which incorporates 10 CFR 71.4 by reference; and

(c) Monitor all packages known to contain radioactive material for radioactive contamination and radiation levels if there is evidence of degradation of package integrity, such as packages that are crushed, wet, or damaged.

(3) The licensee or registrant shall perform the monitoring required by Subsection R313-15-906(2) as soon as practical after receipt of the package, but not later than three hours after the package is received at the licensee's or registrant's facility if it is received during the licensee's or registrant's normal working hours or if there is evidence of degradation of package integrity, such as a package that is crushed, wet, or damaged. If a package is received after working hours, and has no evidence of degradation of package integrity, the package shall be monitored no later than three hours from the beginning of the next working day.

(4) The licensee or registrant shall immediately notify the final delivery carrier and, by telephone and telegram, mailgram, or facsimile, the Director when:

(a) Removable radioactive surface contamination exceeds the limits of Section R313-19-100 which incorporates 10 CFR 71.87(i) by reference; or

(b) External radiation levels exceed the limits of Section R313-19-100 which incorporates 10 CFR 71.47 by reference.

(5) Each licensee or registrant shall:

(a) Establish, maintain, and retain written procedures for safely opening packages in which radioactive material is received; and

(b) Ensure that the procedures are followed and that due consideration is given to special instructions for the type of package being opened.

(6) Licensees or registrants transferring special form sources in vehicles owned or operated by the licensee or registrant to and from a work site are exempt from the contamination monitoring requirements of Subsection R313-15-906(2), but are not exempt from the monitoring requirement in Subsection R313-15-906(2) for measuring radiation levels that ensures that the source is still properly lodged in its shield.

R313-15-1001. Waste Disposal - General Requirements.

(1) A licensee or registrant shall dispose of licensed or registered material only:

(a) By transfer to an authorized recipient as provided in Section R313-15-1006 or in Rules R313-21, R313-22, R313-24, or R313-25, or to the U.S. Department of Energy; or

(b) By decay in storage; or

(c) By release in effluents within the limits in Section R313-15-301; or

(d) As authorized pursuant to Sections R313-15-1002, R313-15-1003, R313-15-1004, R313-15-1005, or R313-15-1008.

(2) A person shall be specifically licensed or registered to receive waste containing licensed or registered material from other persons for:

(a) Treatment prior to disposal; or

(b) Treatment or disposal by incineration; or

(c) Decay in storage; or

(d) Disposal at a land disposal facility licensed pursuant to Rule R313-25; or

(e) Storage until transferred to a storage or disposal facility authorized to receive the waste.

R313-15-1002. Method for Obtaining Approval of Proposed Disposal Procedures.

A licensee or registrant or applicant for a license or registration may apply to the Director for approval of proposed procedures, not otherwise authorized in these rules, to dispose of licensed or registered material generated in the licensee's or registrant's operations. Each application shall include:

(1) A description of the waste containing licensed or registered material to be disposed of, including the physical and chemical properties that have an impact on risk evaluation, and the proposed manner and conditions of waste disposal; and

(2) An analysis and evaluation of pertinent information on the nature of the environment; and

(3) The nature and location of other potentially affected facilities; and

(4) Analyses and procedures to ensure that doses are maintained ALARA and within the dose limits in Rule R313-15.

R313-15-1003. Disposal by Release into Sanitary Sewerage.

(1) A licensee or registrant may discharge licensed or registered material into sanitary sewerage if each of the

following conditions is satisfied:

- (a) The material is readily soluble, or is readily dispersible biological material, in water; and
- (b) The quantity of licensed or registered radioactive material that the licensee or registrant releases into the sewer in one month divided by the average monthly volume of water released into the sewer by the licensee or registrant does not exceed the concentration listed in Table III of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference; and
- (c) If more than one radionuclide is released, the following conditions shall also be satisfied:
 - (i) The licensee or registrant shall determine the fraction of the limit in Table III of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference, represented by discharges into sanitary sewerage by dividing the actual monthly average concentration of each radionuclide released by the licensee or registrant into the sewer by the concentration of that radionuclide listed in Table III of Appendix B of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference; and
 - (ii) The sum of the fractions for each radionuclide required by Subsection R313-15-1003(1)(c)(i) does not exceed unity; and
- (d) The total quantity of licensed or registered radioactive material that the licensee or registrant releases into the sanitary sewerage system in a year does not exceed 185 GBq (five Ci) of hydrogen-3, 37 GBq (one Ci) of carbon-14, and 37 GBq (one Ci) of all other radioactive materials combined.

(2) Excreta from individuals undergoing medical diagnosis or therapy with radioactive material are not subject to the limitations contained in Subsection R313-15-1003(1).

R313-15-1004. Treatment or Disposal by Incineration.

A licensee or registrant may treat or dispose of licensed or registered material by incineration only in the form and concentration specified in Section R313-15-1005 or as specifically approved by the Director pursuant to Section R313-15-1002.

R313-15-1005. Disposal of Specific Wastes.

(1) A licensee or registrant may dispose of the following licensed or registered material as if it were not radioactive:

- (a) 1.85 kBq (0.05 uCi), or less, of hydrogen-3 or carbon-14 per gram of medium used for liquid scintillation counting; and
- (b) 1.85 kBq (0.05 uCi) or less, of hydrogen-3 or carbon-14 per gram of animal tissue, averaged over the weight of the entire animal.

(2) A licensee or registrant shall not dispose of tissue pursuant to Subsection R313-15-1005(1)(b) in a manner that would permit its use either as food for humans or as animal feed.

(3) The licensee or registrant shall maintain records in accordance with Section R313-15-1109.

R313-15-1006. Transfer for Disposal and Manifests.

(1) The requirements of Section R313-15-1006 and Appendix G of 10 CFR 20.1001 to 20.2402, (2010), which are incorporated into these rules by reference, are designed to:

- (a) control transfers of low-level radioactive waste by any waste generator, waste collector, or waste processor licensee, as defined in Appendix G in 10 CFR 20.1001 to 20.2402, (2010), who ships low-level waste either directly, or indirectly through a waste collector or waste processor, to a licensed low-level waste land disposal facility as defined in Section R313-25-2;

- (b) establish a manifest tracking system; and

(c) supplement existing requirements concerning transfers and recordkeeping for those wastes.

(2) Any licensee shipping radioactive waste intended for ultimate disposal at a licensed land disposal facility must document the information required on the U.S. Nuclear Regulatory Commission's Uniform Low-Level Radioactive Waste Manifest and transfer this recorded manifest information to the intended consignee in accordance with Appendix G to 10 CFR 20.1001 to 20.2402, (2010), which is incorporated into these rules by reference.

(3) Each shipment manifest shall include a certification by the waste generator as specified in Section II of Appendix G to 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference.

(4) Each person involved in the transfer of waste for disposal or in the disposal of waste, including the waste generator, waste collector, waste processor, and disposal facility operator, shall comply with the requirements specified in Section III of Appendix G to 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference.

(5) A licensee shipping byproduct material as defined in paragraphs (c) and (d) of the Section R313-12-3 definition of byproduct material intended for ultimate disposal at a land disposal facility licensed under Rule R313-25 must document the information required on the NRC's Uniform Low-Level Radioactive Waste Manifest and transfer the recorded manifest information to the intended consignee in accordance with Appendix G to 10 CFR Part 20 (2010 edition).

R313-15-1007. Compliance with Environmental and Health Protection Rules.

Nothing in Sections R313-15-1001, R313-15-1002, R313-15-1003, R313-15-1004, R313-15-1005, or R313-15-1006 relieves the licensee or registrant from complying with other applicable Federal, State and local rules governing any other toxic or hazardous properties of materials that may be disposed of pursuant to Sections R313-15-1001, R313-15-1002, R313-15-1003, R313-15-1004, R313-15-1005, or R313-15-1006.

R313-15-1008. Disposal of Section R313-12-3 Byproduct Material Definition Paragraphs (c) and (d).

(1) Licensed material defined in Section R313-12-3, byproduct material definition, paragraphs (c) and (d), may be disposed in accordance with Rule R313-25, even though it is not defined as low-level radioactive waste. Therefore, licensed byproduct material being disposed of at a facility, or transferred for ultimate disposal at a facility licensed under Rule R313-25, must meet the requirements of Section R313-15-1006.

(2) A licensee may dispose of licensed material defined in Section R313-12-3, byproduct material definition, paragraphs (c) and (d), at a disposal facility authorized to dispose of such material in accordance with Federal or State solid or hazardous waste law, including the Solid Waste Disposal Act, as authorized under the Energy Policy Act of 2005.

R313-15-1009. Classification and Characteristics of Low-Level Radioactive Waste.

(1) Classification of Radioactive Waste for Land Disposal

(a) Considerations. Determination of the classification of radioactive waste involves two considerations. First, consideration shall be given to the concentration of long-lived radionuclides (and their shorter-lived precursors) whose potential hazard will persist long after such precautions as institutional controls, improved waste form, and deeper disposal have ceased to be effective. These precautions delay

the time when long-lived radionuclides could cause exposures. In addition, the magnitude of the potential dose is limited by the concentration and availability of the radionuclide at the time of exposure. Second, consideration shall be given to the concentration of shorter-lived radionuclides for which requirements on institutional controls, waste form, and disposal methods are effective.

(b) Classes of waste.

(i) Class A waste is waste that is usually segregated from other waste classes at the disposal site. The physical form and characteristics of Class A waste shall meet the minimum requirements set forth in Subsection R313-15-1009(2)(a). If Class A waste also meets the stability requirements set forth in Subsection R313-15-1009(2)(b), it is not necessary to segregate the waste for disposal.

(ii) Class B waste is waste that shall meet more rigorous requirements on waste form to ensure stability after disposal. The physical form and characteristics of Class B waste shall meet both the minimum and stability requirements set forth in Subsection R313-15-1009(2).

(iii) Class C waste is waste that not only shall meet more rigorous requirements on waste form to ensure stability but also requires additional measures at the disposal facility to protect against inadvertent intrusion. The physical form and characteristics of Class C waste shall meet both the minimum and stability requirements set forth in Subsection R313-15-1009(2).

(c) Classification determined by long-lived radionuclides. If the radioactive waste contains only radionuclides listed in Table I, classification shall be determined as follows:

(i) If the concentration does not exceed 0.1 times the value in Table I, the waste is Class A.

(ii) If the concentration exceeds 0.1 times the value in Table I, but does not exceed the value in Table I, the waste is Class C.

(iii) If the concentration exceeds the value in Table I, the waste is not generally acceptable for land disposal.

(iv) For wastes containing mixtures of radionuclides listed in Table I, the total concentration shall be determined by the sum of fractions rule described in Subsection R313-15-1009(1)(g).

TABLE I

Concentration

Radionuclide
nanocurie/gram(2)

C-14	8
C-14 in activated metal	80
Ni-59 in activated metal	220
Nb-94 in activated metal	0.2
Tc-99	3
I-129	0.08
Alpha emitting transuranic radionuclides with half-life greater than five years	100
Pu-241	3,500
Cm-242	20,000
Ra-226	100

NOTE: (1) To convert the Ci/m³ values to gigabecquerel (GBq)/cubic meter, multiply the Ci/m³ value by 37.
(2) To convert the nCi/g values to becquerel (Bq)/gram, multiply the nCi/g value by 37.

(d) Classification determined by short-lived radionuclides. If the waste does not contain any of the radionuclides listed in Table I, classification shall be determined based on the concentrations shown in Table II. However, as specified in Subsection R313-15-1009(1)(f), if radioactive waste does not contain any nuclides listed in

either Table I or II, it is Class A.

(i) If the concentration does not exceed the value in Column 1, the waste is Class A.

(ii) If the concentration exceeds the value in Column 1 but does not exceed the value in Column 2, the waste is Class B.

(iii) If the concentration exceeds the value in Column 2 but does not exceed the value in Column 3, the waste is Class C.

(iv) If the concentration exceeds the value in Column 3, the waste is not generally acceptable for near-surface disposal.

(v) For wastes containing mixtures of the radionuclides listed in Table II, the total concentration shall be determined by the sum of fractions rule described in Subsection R313-15-1009(1)(g).

TABLE II

Radionuclide	Concentration, curie/cubic meter(1)		
	Column 1	Column 2	Column 3
3			
Total of all radionuclides with less than 5-year half-life	700	(2)	(2)
H-3	40	(2)	(2)
Co-60	700	(2)	(2)
Ni-63	3.5	70	700
Ni-63 in activated metal	35	700	7000
Sr-90	0.04	150	7000
Cs-137	1	44	4600

NOTE: (1) To convert the Ci/m³ value to gigabecquerel (GBq)/cubic meter, multiply the Ci/m³ value by 37.

(2) There are no limits established for these radionuclides in Class B or C wastes. Practical considerations such as the effects of external radiation and internal heat generation on transportation, handling, and disposal will limit the concentrations for these wastes. These wastes shall be Class B unless the concentrations of other radionuclides in Table II determine the waste to be Class C independent of these radionuclides.

(e) Classification determined by both long- and short-lived radionuclides. If the radioactive waste contains a mixture of radionuclides, some of which are listed in Table I and some of which are listed in Table II, classification shall be determined as follows:

(i) If the concentration of a radionuclide listed in Table I is less than 0.1 times the value listed in Table I, the class shall be that determined by the concentration of radionuclides listed in Table II.

(ii) If the concentration of a radionuclide listed in Table I exceeds 0.1 times the value listed in Table I, but does not exceed the value in Table I, the waste shall be Class C, provided the concentration of radionuclides listed in Table II does not exceed the value shown in Column 3 of Table II.

(f) Classification of wastes with radionuclides other than those listed in Tables I and II. If the waste does not contain any radionuclides listed in either Table I or II, it is Class A.

(g) The sum of the fractions rule for mixtures of radionuclides. For determining classification for waste that contains a mixture of radionuclides, it is necessary to determine the sum of fractions by dividing each radionuclide's concentration by the appropriate limit and adding the resulting values. The appropriate limits shall all be taken from the same column of the same table. The sum of the fractions for the column shall be less than 1.0 if the waste class is to be determined by that column. Example: A waste contains Sr-90 in a concentration of 1.85 TBq/m³ (50 Ci/m³) and Cs-137 in a concentration of 814 GBq/m³ (22 Ci/m³). Since the concentrations both exceed the values in Column 1, Table II, they shall be compared to Column 2 values. For Sr-

90 fraction, $50/150 = 0.33$., for Cs-137 fraction, $22/44 = 0.5$; the sum of the fractions = 0.83. Since the sum is less than 1.0, the waste is Class B.

(h) Determination of concentrations in wastes. The concentration of a radionuclide may be determined by indirect methods such as use of scaling factors which relate the inferred concentration of one radionuclide to another that is measured, or radionuclide material accountability, if there is reasonable assurance that the indirect methods can be correlated with actual measurements. The concentration of a radionuclide may be averaged over the volume of the waste, or weight of the waste if the units are expressed as becquerel (nanocurie) per gram.

(2) Radioactive Waste Characteristics

(a) The following are minimum requirements for all classes of waste and are intended to facilitate handling and provide protection of health and safety of personnel at the disposal site.

(i) Wastes shall be packaged in conformance with the conditions of the license issued to the site operator to which the waste will be shipped. Where the conditions of the site license are more restrictive than the provisions of Rule R313-15, the site license conditions shall govern.

(ii) Wastes shall not be packaged for disposal in cardboard or fiberboard boxes.

(iii) Liquid waste shall be packaged in sufficient absorbent material to absorb twice the volume of the liquid.

(iv) Solid waste containing liquid shall contain as little free-standing and non-corrosive liquid as is reasonably achievable, but in no case shall the liquid exceed one percent of the volume.

(v) Waste shall not be readily capable of detonation or of explosive decomposition or reaction at normal pressures and temperatures, or of explosive reaction with water.

(vi) Waste shall not contain, or be capable of generating, quantities of toxic gases, vapors, or fumes harmful to persons transporting, handling, or disposing of the waste. This does not apply to radioactive gaseous waste packaged in accordance with Subsection R313-15-1009(2)(a)(viii).

(vii) Waste shall not be pyrophoric. Pyrophoric materials contained in wastes shall be treated, prepared, and packaged to be nonflammable.

(viii) Wastes in a gaseous form shall be packaged at an absolute pressure that does not exceed 1.5 atmospheres at 20 degrees celsius. Total activity shall not exceed 3.7 TBq (100 Ci) per container.

(ix) Wastes containing hazardous, biological, pathogenic, or infectious material shall be treated to reduce to the maximum extent practical the potential hazard from the non-radiological materials.

(b) The following requirements are intended to provide stability of the waste. Stability is intended to ensure that the waste does not degrade and affect overall stability of the site through slumping, collapse, or other failure of the disposal unit and thereby lead to water infiltration. Stability is also a factor in limiting exposure to an inadvertent intruder, since it provides a recognizable and nondispersible waste.

(i) Waste shall have structural stability. A structurally stable waste form will generally maintain its physical dimensions and its form, under the expected disposal conditions such as weight of overburden and compaction equipment, the presence of moisture, and microbial activity, and internal factors such as radiation effects and chemical changes. Structural stability can be provided by the waste form itself, processing the waste to a stable form, or placing the waste in a disposal container or structure that provides stability after disposal.

(ii) Notwithstanding the provisions in Subsections R313-15-1009(2)(a)(iii) and R313-15-1009(2)(a)(iv), liquid

wastes, or wastes containing liquid, shall be converted into a form that contains as little free-standing and non-corrosive liquid as is reasonably achievable, but in no case shall the liquid exceed one percent of the volume of the waste when the waste is in a disposal container designed to ensure stability, or 0.5 percent of the volume of the waste for waste processed to a stable form.

(iii) Void spaces within the waste and between the waste and its package shall be reduced to the extent practical.

(3) Labeling. Each package of waste shall be clearly labeled to identify whether it is Class A, Class B, or Class C waste, in accordance with Subsection R313-15-1009(1).

R313-15-1101. Records - General Provisions.

(1) Each licensee or registrant shall use the SI units becquerel, gray, sievert and coulomb per kilogram, or the special units, curie, rad, rem, and roentgen, including multiples and subdivisions, and shall clearly indicate the units of all quantities on records required by Rule R313-15.

(2) Notwithstanding the requirements of Subsection R313-15-1101(1), when recording information on shipment manifests, as required in Subsection R313-15-1006(2), information must be recorded in SI units or in SI units and the special units specified in Subsection R313-15-1101(1).

(3) The licensee or registrant shall make a clear distinction among the quantities entered on the records required by Rule R313-15, such as, total effective dose equivalent, total organ dose equivalent, shallow dose equivalent, lens dose equivalent, deep dose equivalent, or committed effective dose equivalent.

R313-15-1102. Records of Radiation Protection Programs.

(1) Each licensee or registrant shall maintain records of the radiation protection program, including:

(a) The provisions of the program; and

(b) Audits and other reviews of program content and implementation.

(2) The licensee or registrant shall retain the records required by Subsection R313-15-1102(1)(a) until the Director terminates each pertinent license or registration requiring the record. The licensee or registrant shall retain the records required by Subsection R313-15-1102(1)(b) for three years after the record is made.

R313-15-1103. Records of Surveys.

(1) Each licensee or registrant shall maintain records showing the results of surveys and calibrations required by Section R313-15-501 and Subsection R313-15-906(2). The licensee or registrant shall retain these records for three years after the record is made.

(2) The licensee or registrant shall retain each of the following records until the Director terminates each pertinent license or registration requiring the record:

(a) Records of the results of surveys to determine the dose from external sources of radiation used, in the absence of or in combination with individual monitoring data, in the assessment of individual dose equivalents; and

(b) Records of the results of measurements and calculations used to determine individual intakes of radioactive material and used in the assessment of internal dose; and

(c) Records showing the results of air sampling, surveys, and bioassays required pursuant to Subsections R313-15-703(3)(a) and R313-15-703(3)(b); and

(d) Records of the results of measurements and calculations used to evaluate the release of radioactive effluents to the environment.

R313-15-1105. Records of Prior Occupational Dose.

For each individual who is likely to receive in a year an occupational dose requiring monitoring pursuant to Section R313-15-502, the licensee or registrant shall retain the records of prior occupational dose and exposure history as specified in Section R313-15-205 on form DRC-05 or equivalent until the Director terminates each pertinent license requiring this record. The licensee or registrant shall retain records used in preparing form DRC-05 or equivalent for three years after the record is made.

R313-15-1106. Records of Planned Special Exposures.

(1) For each use of the provisions of Section R313-15-206 for planned special exposures, the licensee or registrant shall maintain records that describe:

- (a) The exceptional circumstances requiring the use of a planned special exposure; and
- (b) The name of the management official who authorized the planned special exposure and a copy of the signed authorization; and
- (c) What actions were necessary; and
- (d) Why the actions were necessary; and
- (e) What precautions were taken to assure that doses were maintained ALARA; and
- (f) What individual and collective doses were expected to result; and
- (g) The doses actually received in the planned special exposure.

(2) The licensee or registrant shall retain the records until the Director terminates each pertinent license or registration requiring these records.

R313-15-1107. Records of Individual Monitoring Results.

(1) Recordkeeping Requirement. Each licensee or registrant shall maintain records of doses received by all individuals for whom monitoring was required pursuant to Section R313-15-502, and records of doses received during planned special exposures, accidents, and emergency conditions. Assessments of dose equivalent and records made using units in effect before January 1, 1994, need not be changed. These records shall include, when applicable:

- (a) The deep dose equivalent to the whole body, lens dose equivalent, shallow dose equivalent to the skin, and shallow dose equivalent to the extremities; and
- (b) The estimated intake of radionuclides, see Section R313-15-202; and
- (c) The committed effective dose equivalent assigned to the intake of radionuclides; and
- (d) The specific information used to calculate the committed effective dose equivalent pursuant to Subsections R313-15-204(1) and R313-15-204(3) and when required by Section R313-15-502; and
- (e) The total effective dose equivalent when required by Section R313-15-202; and
- (f) The total of the deep dose equivalent and the committed dose to the organ receiving the highest total dose.

(2) Recordkeeping Frequency. The licensee or registrant shall make entries of the records specified in Subsection R313-15-1107(1) at intervals not to exceed one year.

(3) Recordkeeping Format. The licensee or registrant shall maintain the records specified in Subsection R313-15-1107(1) on form DRC-06, in accordance with the instructions for form DRC-06, or in clear and legible records containing all the information required by form DRC-06.

(4) The licensee or registrant shall maintain the records of dose to an embryo/fetus with the records of dose to the declared pregnant woman. The declaration of pregnancy, including the estimated date of conception, shall also be kept on file, but may be maintained separately from the dose

records.

(5) The licensee or registrant shall retain each required form or record until the Director terminates each pertinent license or registration requiring the record.

R313-15-1108. Records of Dose to Individual Members of the Public.

(1) Each licensee or registrant shall maintain records sufficient to demonstrate compliance with the dose limit for individual members of the public. See Section R313-15-301.

(2) The licensee or registrant shall retain the records required by Subsection R313-15-1108(1) until the Director terminates each pertinent license or registration requiring the record. Requirements for disposition of these records, prior to license termination, are located in Section R313-12-51 for activities licensed under these rules.

R313-15-1109. Records of Waste Disposal.

(1) Each licensee or registrant shall maintain records of the disposal of licensed or registered materials made pursuant to Sections R313-15-1002, R313-15-1003, R313-15-1004, R313-15-1005, Rule R313-25, and disposal by burial in soil, including burials authorized before January 28, 1981.

(2) The licensee or registrant shall retain the records required by Subsection R313-15-1109(1) until the Director terminates each pertinent license or registration requiring the record.

R313-15-1110. Records of Testing Entry Control Devices for Very High Radiation Areas.

(1) Each licensee or registrant shall maintain records of tests made pursuant to Subsection R313-15-603(2)(i) on entry control devices for very high radiation areas. These records shall include the date, time, and results of each such test of function.

(2) The licensee or registrant shall retain the records required by Subsection R313-15-1110(1) for three years after the record is made.

R313-15-1111. Form of Records.

Each record required by Rule R313-15 shall be legible throughout the specified retention period. The record shall be the original or a reproduced copy or a microform, provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period or the record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records, such as letters, drawings, and specifications, shall include all pertinent information, such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

R313-15-1201. Reports of Stolen, Lost, or Missing Licensed or Registered Sources of Radiation.

(1) Telephone Reports. Each licensee or registrant shall report to the Director by telephone as follows:

(a) Immediately after its occurrence becomes known to the licensee or registrant, stolen, lost, or missing licensed or registered radioactive material in an aggregate quantity equal to or greater than 1,000 times the quantity specified in Appendix C of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference, under such circumstances that it appears to the licensee or registrant that an exposure could result to individuals in unrestricted areas;

(b) Within 30 days after its occurrence becomes known to the licensee or registrant, lost, stolen, or missing licensed or registered radioactive material in an aggregate quantity

greater than ten times the quantity specified in Appendix C of 10 CFR 20.1001 to 20.2402, (2010), which is incorporated by reference, that is still missing.

(c) Immediately after its occurrence becomes known to the registrant, a stolen, lost, or missing radiation machine.

(2) Written Reports. Each licensee or registrant required to make a report pursuant to Subsection R313-15-1201(1) shall, within 30 days after making the telephone report, make a written report to the Director setting forth the following information:

(a) A description of the licensed or registered source of radiation involved, including, for radioactive material, the kind, quantity, and chemical and physical form; and, for radiation machines, the manufacturer, model and serial number, type and maximum energy of radiation emitted;

(b) A description of the circumstances under which the loss or theft occurred; and

(c) A statement of disposition, or probable disposition, of the licensed or registered source of radiation involved; and

(d) Exposures of individuals to radiation, circumstances under which the exposures occurred, and the possible total effective dose equivalent to persons in unrestricted areas; and

(e) Actions that have been taken, or will be taken, to recover the source of radiation; and

(f) Procedures or measures that have been, or will be, adopted to ensure against a recurrence of the loss or theft of licensed or registered sources of radiation.

(3) Subsequent to filing the written report, the licensee or registrant shall also report additional substantive information on the loss or theft within 30 days after the licensee or registrant learns of such information.

(4) The licensee or registrant shall prepare any report filed with the Director pursuant to Section R313-15-1201 so that names of individuals who may have received exposure to radiation are stated in a separate and detachable portion of the report.

R313-15-1202. Notification of Incidents.

(1) Immediate Notification. Notwithstanding other requirements for notification, each licensee or registrant shall immediately report each event involving a source of radiation possessed by the licensee or registrant that may have caused or threatens to cause any of the following conditions:

(a) An individual to receive:

(i) A total effective dose equivalent of 0.25 Sv (25 rem) or more; or

(ii) A lens dose equivalent of 0.75 Sv (75 rem) or more; or

(iii) A shallow dose equivalent to the skin or extremities or a total organ dose equivalent of 2.5 Gy (250 rad) or more; or

(b) The release of radioactive material, inside or outside of a restricted area, so that, had an individual been present for 24 hours, the individual could have received an intake five times the occupational ALI. This provision does not apply to locations where personnel are not normally stationed during routine operations, such as hot-cells or process enclosures.

(2) Twenty-Four Hour Notification. Each licensee or registrant shall, within 24 hours of discovery of the event, report to the Director each event involving loss of control of a licensed or registered source of radiation possessed by the licensee or registrant that may have caused, or threatens to cause, any of the following conditions:

(a) An individual to receive, in a period of 24 hours:

(i) A total effective dose equivalent exceeding 0.05 Sv (five rem); or

(ii) A lens dose equivalent exceeding 0.15 Sv (15 rem); or

(iii) A shallow dose equivalent to the skin or extremities

or a total organ dose equivalent exceeding 0.5 Sv (50 rem); or

(b) The release of radioactive material, inside or outside of a restricted area, so that, had an individual been present for 24 hours, the individual could have received an intake in excess of one occupational ALI. This provision does not apply to locations where personnel are not normally stationed during routine operations, such as hot-cells or process enclosures.

(3) The licensee or registrant shall prepare each report filed with the Director pursuant to Section R313-15-1202 so that names of individuals who have received exposure to sources of radiation are stated in a separate and detachable portion of the report.

(4) Licensees or registrants shall make the reports required by Subsections R313-15-1202(1) and R313-15-1202(2) to the Director by telephone, telegram, mailgram, or facsimile.

(5) The provisions of Section R313-15-1202 do not apply to doses that result from planned special exposures, provided such doses are within the limits for planned special exposures and are reported pursuant to Section R313-15-1204.

R313-15-1203. Reports of Exposures, Radiation Levels, and Concentrations of Radioactive Material Exceeding the Constraints or Limits.

(1) Reportable Events. In addition to the notification required by Section R313-15-1202, each licensee or registrant shall submit a written report within 30 days after learning of any of the following occurrences:

(a) Incidents for which notification is required by Section R313-15-1202; or

(b) Doses in excess of any of the following:

(i) The occupational dose limits for adults in Section R313-15-201; or

(ii) The occupational dose limits for a minor in Section R313-15-207; or

(iii) The limits for an embryo/fetus of a declared pregnant woman in Section R313-15-208; or

(iv) The limits for an individual member of the public in Section R313-15-301; or

(v) Any applicable limit in the license or registration; or

(vi) The ALARA constraints for air emissions established under Subsection R313-15-101(4); or

(c) Levels of radiation or concentrations of radioactive material in:

(i) A restricted area in excess of applicable limits in the license or registration; or

(ii) An unrestricted area in excess of ten times the applicable limit set forth in Rule R313-15 or in the license or registration, whether or not involving exposure of any individual in excess of the limits in Section R313-15-301; or

(d) For licensees subject to the provisions of U.S. Environmental Protection Agency's generally applicable environmental radiation standards in 40 CFR 190, levels of radiation or releases of radioactive material in excess of those standards, or of license conditions related to those standards.

(2) Contents of Reports.

(a) Each report required by Subsection R313-15-1203(1) shall describe the extent of exposure of individuals to radiation and radioactive material, including, as appropriate:

(i) Estimates of each individual's dose; and

(ii) The levels of radiation and concentrations of radioactive material involved; and

(iii) The cause of the elevated exposures, dose rates, or concentrations; and

(iv) Corrective steps taken or planned to ensure against a recurrence, including the schedule for achieving conformance with applicable limits, ALARA constraints,

generally applicable environmental standards, and associated license or registration conditions.

(b) Each report filed pursuant to Subsection R313-15-1203(1) shall include for each occupationally overexposed individual: the name, Social Security account number, and date of birth. With respect to the limit for the embryo/fetus in Section R313-15-208, the identifiers should be those of the declared pregnant woman. The report shall be prepared so that this information is stated in a separate and detachable portion of the report.

(3) All licensees or registrants who make reports pursuant to Subsection R313-15-1203(1) shall submit the report in writing to the Director.

R313-15-1204. Reports of Planned Special Exposures.

The licensee or registrant shall submit a written report to the Director within 30 days following any planned special exposure conducted in accordance with Section R313-15-206, informing the Director that a planned special exposure was conducted and indicating the date the planned special exposure occurred and the information required by Section R313-15-1106.

R313-15-1205. Reports to Individuals of Exceeding Dose Limits.

When a licensee or registrant is required, pursuant to the provisions of Sections R313-15-1203 or R313-15-1204, to report to the Director any exposure of an identified occupationally exposed individual, or an identified member of the public, to sources of radiation, the licensee or registrant shall also provide the individual a written report on the exposure data included in the report to the Director. This report shall be transmitted at a time no later than the transmittal to the Director.

R313-15-1206. Reports of Transactions Involving Nationally Tracked Sources.

Each licensee who manufactures, transfers, receives, disassembles, or disposes of a nationally tracked source shall complete and submit a National Source Tracking Transaction Report as specified in paragraphs (1) through (5) of this section for each type of transaction.

(1) Each licensee who manufactures a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

- (a) The name, address, and license number of the reporting licensee;
- (b) The name of the individual preparing the report;
- (c) The manufacturer, model, and serial number of the source;
- (d) The radioactive material in the source;
- (e) The initial source strength in becquerels (curies) at the time of manufacture; and
- (f) The manufacture date of the source.

(2) Each licensee that transfers a nationally tracked source to another person shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

- (a) The name, address, and license number of the reporting licensee;
- (b) The name of the individual preparing the report;
- (c) The name and license number of the recipient facility and the shipping address;
- (d) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
- (e) The radioactive material in the source;
- (f) The initial or current source strength in becquerels

(curies);

- (g) The date for which the source strength is reported;
- (h) The shipping date;
- (i) The estimated arrival date; and
- (j) For nationally tracked sources transferred as waste under a Uniform Low-Level Radioactive Waste Manifest, the waste manifest number and the container identification of the container with the nationally tracked source.

(3) Each licensee that receives a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

- (a) The name, address, and license number of the reporting licensee;
- (b) The name of the individual preparing the report;
- (c) The name, address, and license number of the person that provided the source;
- (d) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
- (e) The radioactive material in the source;
- (f) The initial or current source strength in becquerels (curies);

- (g) The date for which the source strength is reported;
- (h) The date of receipt; and
- (i) For material received under a Uniform Low-Level Radioactive Waste Manifest, the waste manifest number and the container identification with the nationally tracked source.

(4) Each licensee that disassembles a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

- (a) The name, address, and license number of the reporting licensee;
- (b) The name of the individual preparing the report;
- (c) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
- (d) The radioactive material in the source;
- (e) The initial or current source strength in becquerels (curies);

- (f) The date for which the source strength is reported; and

- (g) The disassemble date of the source.

(5) Each licensee who disposes of a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

- (a) The name, address, and license number of the reporting licensee;
- (b) The name of the individual preparing the report;
- (c) The waste manifest number;
- (d) The container identification with the nationally tracked source.
- (e) The date of disposal; and
- (f) The method of disposal.

(6) The reports discussed in paragraphs (1) through (5) of this section must be submitted by the close of the next business day after the transaction. A single report may be submitted for multiple sources and transactions. The reports must be submitted to the National Source Tracking System by using:

- (a) The on-line National Source Tracking System;
 - (b) Electronically using a computer-readable format;
 - (c) By facsimile;
 - (d) By mail to the address on the National Source Tracking Transaction Report Form (NRC Form 748); or
 - (e) By telephone with followup by facsimile or mail.
- (7) Each licensee shall correct any error in previously

filed reports or file a new report for any missed transaction within 5 business days of the discovery of the error or missed transaction. Such errors may be detected by a variety of methods such as administrative reviews or by physical inventories required by regulation. In addition, each licensee shall reconcile the inventory of nationally tracked sources possessed by the licensee against that licensee's data in the National Source Tracking System. The reconciliation must be conducted during the month of January in each year. The reconciliation process must include resolving any discrepancies between the National Source Tracking System and the actual inventory by filing the reports identified by paragraphs (1) through (5) of this section. By January 31 of each year, each licensee must submit to the National Source Tracking System confirmation that the data in the National Source Tracking System is correct.

(8) Each licensee that possesses Category 1 nationally tracked sources shall report its initial inventory of Category 1 nationally tracked sources to the National Source Tracking System by November 15, 2007. Each licensee that possesses Category 2 nationally tracked sources shall report its initial inventory of Category 2 nationally tracked sources to the National Source Tracking System by November 30, 2007. The information may be submitted by using any of the methods identified by paragraph (6)(a) through (6)(d) of this section. The initial inventory report must include the following information:

- (a) The name, address, and license number of the reporting licensee;
- (b) The name of the individual preparing the report;
- (c) The manufacturer, model, and serial number of each nationally tracked source or, if not available, other information to uniquely identify the source;
- (d) The radioactive material in the sealed source;
- (e) The initial or current source strength in becquerels (curies); and
- (f) The date for which the source strength is reported.

R313-15-1207. Notifications and Reports to Individuals.

(1) Requirements for notification and reports to individuals of exposure to radiation or radioactive material are specified in Rule R313-18.

(2) When a licensee or registrant is required pursuant to Section R313-15-1203 to report to the Director any exposure of an individual to radiation or radioactive material, the licensee or registrant shall also notify the individual. Such notice shall be transmitted at a time not later than the transmittal to the Director, and shall comply with the provisions of Rule R313-18.

R313-15-1301. Vacating Premises.

Each specific licensee or registrant shall, no less than 30 days before vacating or relinquishing possession or control of premises which may have been contaminated with radioactive material as a result of his activities, notify the Director in writing of intent to vacate. When deemed necessary by the Director, the licensee shall decontaminate the premises in such a manner that the annual total effective dose equivalent to any individual after the site is released for unrestricted use should not exceed 0.1 mSv (0.01 rem) above background and that the annual total effective dose equivalent from any specific environmental source during decommissioning activities should not exceed 0.1 mSv (0.01 rem) above background.

KEY: radioactive materials, contamination, waste disposal, safety

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Notice of Continuation December 3, 2012

19-3-104

19-3-108

R313. Environmental Quality, Radiation Control.
R313-24. Uranium Mills and Source Material Mill
Tailings Disposal Facility Requirements.

R313-24-1. Purpose and Authority.

(1) The purpose of this rule is to prescribe requirements for possession and use of source material in milling operations such as conventional milling, in-situ leaching, or heap-leaching. The rule includes requirements for the possession of byproduct material, as defined in Section R313-12-3 (see "byproduct material" definition (b)), from source material milling operations, as well as, possession and maintenance of a facility in standby mode. In addition, requirements are prescribed for the receipt of byproduct material from other persons for possession and disposal. The rule also prescribes requirements for receipt of byproduct material from other persons for possession and disposal incidental to the byproduct material generated by the licensee's source material milling operations.

(2) The rules set forth herein are adopted pursuant to the provisions of Subsections 19-3-104(4) and 19-3-104(8).

(3) The requirements of Rule R313-24 are in addition to, and not substitution for, the other applicable requirements of Title R313. In particular, the provisions of Rules R313-12, R313-15, R313-18, R313-19, R313-21, R313-22, and R313-70 apply to applicants and licensees subject to Rule R313-24.

(4) See R313-17-4 for special procedures for decisions associated with licenses for activity which results in the production or disposal of byproduct material.

R313-24-2. Scope.

(1) The requirements in Rule R313-24 apply to source material milling operations, byproduct material, and byproduct material disposal facilities.

R313-24-3. Environmental Analysis.

(1) Each new license application, renewal, or major amendment shall contain an environmental report describing the proposed action, a statement of its purposes, and the environment affected. The environmental report shall present a discussion of the following:

(a) An assessment of the radiological and nonradiological impacts to the public health from the activities to be conducted pursuant to the license or amendment;

(b) An assessment of any impact on waterways and groundwater resulting from the activities conducted pursuant to the license or amendment;

(c) Consideration of alternatives, including alternative sites and engineering methods, to the activities to be conducted pursuant to the license or amendment;

(d) Consideration of the long-term impacts including decommissioning, decontamination, and reclamation impacts, associated with activities to be conducted pursuant to the license or amendment.

(2) Commencement of construction prior to issuance of the license or amendment shall be grounds for denial of the license or amendment.

(3) The Director shall provide a written analysis of the environmental report which shall be available for public notice and comment pursuant to R313-17-2.

R313-24-4. Clarifications or Exceptions.

For the purposes of Rule R313-24, 10 CFR 40.2a through 40.4; 40.12; 40.20(a); 40.21; 40.26(a) through (c); 40.31(h); 40.41(c); the introduction to 40.42(k) and 40.42(k)(3)(i); 40.61(a) and (b); 40.65; and Appendix A to Part 40(2002) are incorporated by reference with the following clarifications or exceptions:

(1) The exclusion and substitution of the following:

(a) Exclude 10 CFR 40.26(c)(1) and replace with "(1) The provisions of Sections R313-12-51, R313-12-52, R313-12-53, R313-19-34, R313-19-50, R313-19-61, R313-24-1, Rules R313-14, R313-15, R313-18, and R313-24 (incorporating 10 CFR 40.2a, 40.3, 40.4, and 40.26 by reference)";

(b) In Appendix A to 10 CFR 40, exclude Criterion 5B(1) through 5H, Criterion 7A, Criterion 13, and replace the excluded Criterion with "Utah Administrative Code, R317-6, Ground Water Quality Protection"; and

(c) In Appendix A to 10 CFR 40, exclude Criterion 11A through 11F and Criterion 12;

(2) The substitution of the following:

(a) "10 CFR 40" for reference to "this part" as found throughout the incorporated text;

(b) "Director" for reference to "Commission" in the first and fourth references contained in 10 CFR 40.2a, in 10 CFR 40.3, 40.20(a), 40.26, 40.41(c), 40.61, and 40.65;

(c) "Rules R313-19, R313-21, or R313-22" for "Section 62 of the Act" as found in 10 CFR 40.12(a);

(d) "Rules R313-21 or R313-22" for reference to "the regulations in this part" in 10 CFR 40.41(c);

(e) "Section R313-19-100" for reference to "part 71 of this chapter" as found in 10 CFR 40.41(c);

(f) In 10 CFR 40.42(k)(3)(i), "R313-15-401 through R313-15-406" for reference to "10 CFR part 20, subpart E";

(g) "source material milling" for reference to "uranium milling, in production of uranium hexafluoride, or in a uranium enrichment facility" as found in 10 CFR 40.65(a);

(h) "Director" for reference to "appropriate NRC Regional Office shown in Appendix D to 10 CFR part 20 of this chapter, with copies to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555," as stated in 10 CFR 65(a)(1);

(i) "require the licensee to" for reference to "require to" in 10 CFR 40.65(a)(1); and

(j) In Appendix A to 10 CFR part 40, the following substitutions:

(i) "R313-12-3" for reference to "Sec. 20.1003 of this chapter" as found in the first paragraph of the introduction to Appendix A;

(ii) "Utah Administrative Code, Rule R317-6, Ground Water Quality Protection" for ground water standards in "Environmental Protection Agency in 40 CFR part 192, subparts D and E" as found in the Introduction, paragraph 4; or "Environmental Protection Agency in 40 CFR part 192, subparts D and E (48 FR 45926; October 7, 1983)" as found in Criterion 5;

(iii) "Director as defined in Subsection 19-5-102(6)" for reference to "Commission" in the definition of "compliance period," in paragraph five of the introduction and in Criterion 5A(3);

(iv) "Director" for reference to "Commission" in the definition of "closure plan", in paragraph five of the introduction, and in Criteria 6(2), 6(4), 6(6), 6A(2), 6A(3), 9, and 10 of Appendix A;

(v) "license issued by the Director" for reference to "Commission license" in the definition of "licensed site," in the introduction to Appendix A;

(vi) "Director" for reference to "NRC" in Criterion 4D;

(vii) "representatives of the Director" for reference to "NRC staff" in Criterion 6(6);

(viii) "Director-approved" for reference to "Commission-approved" in Criterion 6A(1) and Criterion 9;

(ix) "Director" for reference to "appropriate NRC regional office as indicated in Criterion 8A" as found, Criterion 8, paragraph 2 or for reference to "appropriate NRC regional office as indicated in Appendix D to 10 CFR part 20

of this chapter, or the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555," as stated in Criterion 8A; and

(x) "Director" for reference to "the Commission or the State regulatory agency" in Criterion 9, paragraph 2.

KEY: environmental analysis, uranium mills, tailings, byproduct material

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19-3-104

Notice of Continuation May 24, 2012

19-3-108

R313. Environmental Quality, Radiation Control.**R313-28. Use of X-Rays in the Healing Arts.****R313-28-10. Purpose and Scope.**

(1) The purpose of the rules in R313-28 is to prescribe the requirements for the use of x-rays in the healing arts.

(2) The rules set forth herein are adopted pursuant to the provisions of Sections 19-3-104(4) and 19-3-104(8).

R313-28-20. Definitions.

As used in R313-28, the following definitions apply:

"Accessible surface" means the external surface of the enclosure or housing provided by the manufacturer.

"Actual focal spot" refer to "Focal spot."

"Aluminum equivalent" means the thickness of aluminum, type 1100 alloy, affording the same attenuation, under specified conditions, as the material in question. The nominal chemical composition of type 1100 aluminum alloy is 99.00 percent minimum aluminum, 0.12 percent copper.

"Assembler" means individuals engaged in the business of assembling, replacing, or installing one or more components into an x-ray system or subsystem. The term includes the owner of an x-ray system or his or her employee or agent if they assemble components into an x-ray system that is subsequently used to provide professional or commercial services.

"Attenuation block" means a block or stack, having appropriate dimensions 20 cm by 20 cm by 3.8 cm, of type 1100 aluminum alloy or other materials having equivalent attenuation.

"Automatic EXPOSURE control" means a device which automatically controls one or more technique factors in order to obtain, at a preselected location, a required quantity of radiation. Phototimer and ion chamber devices are included in this category.

"Barrier" refer to "Protective barrier".

"Beam axis" means a line from the source through the centers of the x-ray fields.

"Beam-limiting device" means a device which provides a means to restrict the dimensions of the x-ray field.

"Certified components" means components of x-ray systems which are subject to regulations promulgated under Public Law 90-602, the Radiation Control for Health and Safety Act of 1968.

"Certified system" means an x-ray system which has one or more certified components.

"Changeable filters" means filters designed to be removed by the operator.

"Coefficient of variation (C)" means the ratio of the standard deviation to the mean value of a population of observations.

"Computed tomography" means the production of a tomogram by the acquisition and computer processing of x-ray transmission data.

"Control panel" means that part of the x-ray control upon which are mounted the switches, knobs, push buttons, and other hardware necessary for setting the technique factors.

"Cooling curve" means the graphical relationship between heat units stored and cooling time.

"CT" means computed tomography.

"CT gantry" means the tube housing assemblies, beam-limiting devices, detectors, and the supporting structures and frames which house these components.

"Dead-man switch" means a switch so constructed that a circuit closing contact can be maintained only by continuous pressure on the switch by the operator.

"Diagnostic source assembly" means the tube housing assembly with a beam-limiting device attached.

"Diagnostic x-ray system" means an x-ray system designed for irradiation of part of the human body for the

purpose of recording or visualization for diagnostic purposes.

"Entrance EXPOSURE rate" means the EXPOSURE free in air per unit time at the point where the useful beam enters the patient.

"Equipment" refer to "X-ray equipment".

"Field emission equipment" means equipment which uses an x-ray tube in which electron emission from the cathode is due solely to the action of an electric field.

"Filter" means material placed in the useful beam to absorb preferentially selected radiations.

"Fluoroscopic imaging assembly" means a subsystem in which x-ray photons produce a fluoroscopic image. It includes equipment housing, electrical interlocks, the primary protective barrier, and structural material providing linkage between the image receptor and the diagnostic source assembly.

"Focal spot" means the area on the anode of the x-ray tube bombarded by the electrons accelerated from the cathode and from which the useful beam originates. Also referred to as "Actual focal spot."

"Gonad shield" means a protective barrier for the testes or ovaries.

"Half-value layer or HVL" means the thickness of specified material which attenuates the beam of radiation to an extent that the EXPOSURE rate is reduced to one-half of its original value. In this definition, the contribution of scatter radiation, other than that which might be present initially in the beam concerned, is deemed to be excluded.

"Healing arts screening" means the use of x-ray equipment to examine individuals who are asymptomatic for the disease for which the screening is being performed and the use of x-rays are not specifically and individually ordered by a licensed practitioner of the healing arts legally authorized to order x-ray tests for the purpose of diagnosis.

"Heat unit" means a unit of energy equal to the product of the peak kilovoltage, milliamperes, and seconds: for example, kVp times mA times seconds.

"HVL" refer to "half value layer."

"Image intensifier" means a device installed in its housing which instantaneously converts an x-ray pattern into a light image of higher energy density.

"Image receptor" means a device, for example, a fluorescent screen radiographic film, solid state detector, or gaseous detector, which transforms incident x-ray photons to produce a visible image or stores the information in a form which can be made into a visible image. In those cases where means are provided to preselect a portion of the image receptor, the term "image receptor" shall mean the preselected portion of the device.

"Irradiation" means the exposure of matter to ionizing radiation.

"Kilovolts peak" refer to "Peak tube potential".

"kV" means kilovolts.

"kVp" refer to "Peak tube potential."

"Lead equivalent" means the thickness of lead affording the same attenuation, under specified conditions, as the material in question.

"Leakage radiation" means radiation emanating from the diagnostic source assembly except for:

- (a) the useful beam, and
- (b) radiation produced when the exposure switch or timer is not activated.

"Leakage technique factors" means the technique factors associated with the diagnostic source assembly which are used in measuring leakage radiation. They are defined as follows:

- (a) For diagnostic source assemblies intended for capacitor energy storage equipment, the maximum-rated peak tube potential and the maximum-rated number of exposures in

an hour for operation at the maximum-rated peak tube potential with the quantity of charge per exposure being ten millicoulombs, ten milliamperere seconds, or the minimum obtainable from the unit, whichever is larger.

(b) For diagnostic source assemblies intended for field emission equipment rated for pulsed operation, the maximum-rated peak tube potential and the maximum-rated number of x-ray pulses in an hour for operation at the maximum-rated peak tube potential.

(c) For other diagnostic source assemblies, the maximum-rated peak tube potential and the maximum-rated continuous tube current for the maximum-rated peak tube potential.

"Light field" means that area of the intersection of the light beam from the beam-limiting device and one of the set of planes parallel to and including the plane of the image receptor, whose perimeter is the locus of points at which the illumination is one-fourth of the maximum in the intersection.

"mA" means tube current in milliamperes.

"mAs" means milliamperere second or the product of the tube current in milliamperes and the time of exposure in seconds.

"Mammography imaging medical physicist" means an individual who conducts mammography surveys of mammography facilities.

"Mammography survey" means an evaluation of x-ray imaging equipment and oversight of a mammography facility's quality control program.

"Mobile x-ray equipment" refer to "X-ray equipment".

"Multiple scan average dose" means the average dose at the center of a series of scans, specified at the center of the axis of rotation of a CT x-ray system.

"New installation" means change, modification or relocation of new or existing shielding or equipment.

"Operator of diagnostic x-ray equipment" means either:

(a) The individual responsible for insuring that the appropriate technique factors are set on the x-ray equipment, or

(b) The individual who makes the radiation exposure.

"Patient" means an individual subjected to healing arts examination, diagnosis, or treatment.

"PBL" refer to "Positive beam limitation."

"Peak tube potential" means the maximum value of the potential difference across the x-ray tube during an exposure.

"Phantom" means a volume of material behaving in a manner similar to tissue with respect to the attenuation and scattering of radiation.

"PID" refer to "Position indicating device."

"Portable x-ray equipment" refer to "X-ray equipment".

"Position indicating device (PID)" means a device, on dental x-ray equipment which indicates the beam position and establishes a definite source-surface (skin) distance. The device may or may not incorporate or serve as a beam-limiting device.

"Positive beam limitation" means the automatic or semi-automatic adjustment of an x-ray beam to the size of the selected image receptor, whereby exposures cannot be made without such adjustment.

"Primary beam scatter" means scattered radiation which has been deviated in direction or energy by materials irradiated by the primary beam.

"Primary protective barrier" refer to "Protective barrier".

"Protective apron" means an apron made of radiation absorbing materials, used to reduce radiation exposure.

"Protective barrier" means a barrier of radiation absorbing material used to reduce radiation exposure.

(a) "Primary protective barrier" means the material, excluding filters, placed in the useful beam to reduce the radiation exposure for protection purposes.

(b) "Secondary protective barrier" means the material which attenuates stray radiation.

"Protective glove" means a glove made of radiation absorbing materials used to reduce radiation exposure.

"Radiation therapy simulation system" means a radiographic or fluoroscopic x-ray system intended for localizing the volume to be exposed during radiation therapy and for confirming the position and size of the therapeutic irradiation field.

"Radiograph" means an image receptor on which the image is created directly or indirectly by an x-ray pattern and results in a permanent record.

"Rating" means the operating limits of an x-ray system or subsystem as specified by the component manufacturer.

"Recording" means producing a permanent form of an image resulting from x-ray photons.

"Reference plane" means a plane which is displaced from and parallel to the tomographic plane.

"Scan" means the complete process of collecting x-ray transmission data for the production of a tomogram. Data can be collected simultaneously during a single scan for the production of one or more tomograms.

"Scan increment" means the amount of relative displacement of the patient with respect to the computer tomographic x-ray system between successive scans measured along the direction of such displacement.

"Scattered radiation" means radiation that, during passage through matter, has been deviated in direction, energy or both direction and energy. Also refer to "Primary Beam Scatter".

"Shutter" means a device attached to the tube housing assembly which can intercept the entire cross sectional area of the useful beam and which has a lead equivalency at least that of the tube housing assembly.

"SID" refer to "Source-image receptor distance".

"Source" means the focal spot of the x-ray tube.

"Source to image receptor distance" means the distance from the source to the center of the input surface of the image receptor.

"Special purpose x-ray system" means that which is designed for irradiation of specific body parts.

"Spot film" means a radiograph which is made during a fluoroscopic examination to permanently record conditions which exist during that fluoroscopic procedure.

"Spot film device" means a device intended to transport or position a radiographic image receptor between the x-ray source and fluoroscopic image receptor, including a device intended to hold a cassette over the input end of an image intensifier for the purpose of making a radiograph.

"SSD" means the distance between the source and the skin entrance plane of the patient.

"Stationary x-ray equipment" refer to "X-ray equipment".

"Stray radiation" means the sum of leakage and scattered radiation.

"Technique factors" means the following conditions of operation.

(a) For capacitor energy storage equipment, peak tube potential in kV and quantity of charge in mAs.

(b) For field emission equipment rated for pulsed operation, peak tube potential in kV and number of x-ray pulses.

(c) For other equipment, peak tube potential in kV and either;

(i) the tube current in mA and exposure time in seconds, or

(ii) the product of tube current and exposure time in mAs.

"Termination of irradiation" means the stopping of

irradiation in a fashion which will not permit continuance of irradiation without the resetting of operating conditions at the control panel.

"Tomogram" means the depiction of the x-ray attenuation properties of a section through the body.

"Tomographic plane" means that geometric plane which is identified as corresponding to the output tomogram.

"Tomographic section" means the volume of an object whose x-ray attenuation properties are imaged in a tomogram.

"Tube" means an x-ray tube, unless otherwise specified.

"Tube housing assembly" means the tube housing with tube installed. It includes high-voltage or filament transformers and other appropriate elements when they are contained within the tube housing.

"Tube rating chart" means the set of curves which specify the rated limits of operation of the tube in terms of the technique factors.

"Useful beam" means the radiation emanating from the tube housing port or the radiation head and passing through the aperture of the beam limiting device when the switch or timer is activated.

"Visible area" means that portion of the input surface of the image receptor over which incident x-ray photons are producing a visible image.

"X-ray exposure control" means a device, switch, button, or other similar means by which an operator initiates or terminates the radiation exposure. The x-ray exposure control may include associated equipment, for example, timers and back-up timers.

"X-ray equipment" means an x-ray system, subsystem, or component thereof. Types of x-ray equipment are as follows:

(a) "Mobile" means x-ray equipment mounted on a permanent base with wheels or casters for moving while completely assembled.

(b) "Portable" means x-ray equipment designed to be hand-carried.

(c) "Stationary" means x-ray equipment which is installed in a fixed location.

"X-ray field" means that area of the intersection of the useful beam and one of the sets of planes parallel to and including the plane of the image receptor, whose perimeter is the locus of points at which the EXPOSURE rate is one-fourth of the maximum in the intersection.

"X-ray high-voltage generator" means a device which transforms electrical energy from the potential supplied by the x-ray control to the tube operating potential. The device may also include means for transforming alternating current to direct current, filament transformers for the x-ray tube high-voltage switches, electrical protective devices, and other appropriate elements.

"X-ray system" means an assemblage of components for the controlled production of x-rays. It includes minimally an x-ray high-voltage generator, an x-ray control, a tube housing assembly, a beam-limiting device, and the necessary supporting structures. Additional components which function with the system are considered integral parts of the system.

"X-ray tube" means an electron tube which is designed to be used primarily for the production of x-rays.

R313-28-31. General and Administrative Requirements.

(1) Persons shall not make, sell, lease, transfer, lend, or install x-ray equipment or the accessories used in connection with x-ray equipment unless the accessories and equipment, when properly placed in operation and properly used, will meet the applicable requirements of these rules.

(2) The registrant shall be responsible for directing the operation of the x-ray machines which are under the registrant's administrative control. The registrant or registrant's agent shall assure that the requirements of R313-

28-31(2)(a) through R313-28-31(2)(i) are met in the operation of the x-ray machines.

(a) An x-ray machine which does not meet the provisions of these rules shall not be operated for diagnostic purposes, when directed by the Director.

(b) Individuals who will be operating the x-ray equipment shall be instructed in the registrant's written radiation safety program and be qualified in the safe use of the equipment. Required operator qualifications are listed in R313-28-350.

(c) The registrant of a facility shall create and make available to x-ray operators written safety procedures, including patient holding and restrictions of the operating technique required for the safe operation of the x-ray systems. Individuals who operate x-ray systems shall be responsible for complying with these rules.

(d) Except for individuals who cannot be moved out of the room and the patient being examined, only the staff and ancillary personnel or other individuals needed for the medical procedure or training shall be present in the room during the radiographic exposure and shall be positioned as follows:

(i) individuals other than the patient shall be positioned so that no part of the body will be struck by the useful beam unless protected by not less than 0.5 mm lead equivalent material;

(ii) the x-ray operator, other staff, ancillary personnel and other individuals needed for the medical procedure shall be protected from primary beam scatter by protective aprons or barriers unless it can be shown that by virtue of distances employed, EXPOSURE levels are reduced to the limits specified in R313-15-201; and

(iii) patients who are not being examined and cannot be removed from the room shall be protected from the primary beam scatter by whole body protective barriers of not less than 0.25 mm lead equivalent material or shall be so positioned that the nearest portion of the body is at least two meters from both the tube head and nearest edge of the image receptor.

(e) For patients who have not passed reproductive age, gonad shielding of not less than 0.5 mm lead equivalent material shall be used during radiographic procedures in which the gonads are in the useful beam, except for cases in which this would interfere with the diagnostic procedure.

(f) Individuals shall be exposed to the useful beam for healing arts purposes only when the exposure has been specifically ordered and authorized by a licensed practitioner of the healing arts after a medical consultation. Deliberate exposures for the following purposes are prohibited:

(i) exposure of an individual for training, demonstration or other non-healing arts purposes; and

(ii) exposure of an individual for the purpose of healing arts screening except as authorized by R313-28-31(2)(i).

(g) When a patient or film must be provided with auxiliary support during a radiation exposure:

(i) mechanical holding devices shall be used when the technique permits. The written procedures, required by R313-28-31(2)(c), shall list individual projections where mechanical holding devices can be utilized;

(ii) written safety procedures, as required by R313-28-31(2)(c), shall indicate the requirements for selecting an individual to hold patients or films and the procedure that individual shall follow;

(iii) the individual holding patients or films during radiographic examinations shall be instructed in personal radiation safety and protected as required by R313-28-31(2)(d)(i);

(iv) Individuals shall not be used routinely to hold film or patients;

(v) In those cases where the patient must hold the film, except during intraoral examinations, portions of the body other than the area of clinical interest struck by the useful beam shall be protected by not less than 0.5 mm lead equivalent material; and

(vi) Facilities shall have protective aprons and gloves available in sufficient numbers to provide protection to personnel who are involved with x-ray operations and who are otherwise not shielded.

(h) Personnel monitoring. Individuals who are associated with the operation of an x-ray system are subject to the applicable requirements of R313-15.

(i) Healing arts screening. Persons proposing to conduct a healing arts screening program shall not initiate the program without prior approval of the Director. When requesting approval, that person shall submit the information outlined in R313-28-400. If information submitted becomes invalid or outdated, the Director shall be notified immediately.

(3) Maintenance of records and information. The registrant shall maintain at least the following information for each x-ray machine:

(a) model numbers of major components;

(b) record of surveys or calculations to demonstrate compliance with R313-15-302, calibration, maintenance and modifications performed on the x-ray machine; and

(c) a shielding design report for the x-ray suite which states assumed values for workload and use factors and includes a drawing of surrounding areas showing assumed values for occupancy factors.

(4) X-ray records. Facilities shall maintain an x-ray record containing the patient's name, the types of examinations, and the dates the examinations were performed. When the patient or film must be provided with human auxiliary support, the name of the human holder shall be recorded. The registrant shall retain these records for three years after the record is made.

(5) Portable or mobile equipment shall be used only for examinations where it is impractical to transfer the patient to a stationary radiographic installation.

(6) Hand-held medical x-ray systems. X-ray equipment designed to be hand-held shall comply with Section R313-28-31, excluding Subsection R313-28-31(5), and R313-28-52, excluding Subsections R313-28-52(8)(b)(i) and (ii).

(a) When operating hand-held equipment for which it is not possible for the operator to remain at least six feet from the x-ray machine during x-ray exposure, protective aprons of at least 0.5 millimeter lead equivalence shall be provided for the operator to protect the operator's torso and gonads from backscatter radiation;

(b) In addition to the dose limits in R313-15-301, operators of hand-held x-ray equipment shall ensure that members of the public that may be exposed to scatter radiation or primary beam transmission from the hand-held device are not exposed above 2 milliroentgen per hour;

(i) Operators will ensure that members of the public likely to be exposed to greater than 2 milliroentgen per hour will be provided protective aprons of at least 0.5 millimeter lead equivalence or are moved to a distance such that the exposure rate to the individual is below 2 milliroentgen per hour; and

(c) In addition to the requirements of Subsection R313-28-350(1), each operator of hand-held x-ray equipment shall complete the training program supplied by the manufacturer prior to using the x-ray unit. Records of training shall be maintained on file for examination by an authorized representative of the Director.

(7) Procedures and auxiliary equipment designed to minimize patient and personnel exposure commensurate with

the needed diagnostic information shall be utilized.

(a) The speed of the screen and film combinations used shall be the fastest speed consistent with the diagnostic objective of the examinations. Film cassettes without intensifying screens shall not be used for routine diagnostic radiological imaging, with the exception of standard film packets for intra-oral use in dental radiography. If the requirements of R313-28-31(6)(a) cannot be met, an exemption may be requested pursuant to R313-12-55.

(b) The radiation exposure to the patient shall be the minimum exposure required to produce images of good diagnostic quality.

(c) X-ray systems, other than fluoroscopic, computed tomography, dental or veterinary units, shall not be utilized in procedures where the source to patient distance is less than 30 centimeters.

R313-28-32. Plan Review.

(1) Prior to construction, the floor plans, shielding specifications and equipment arrangement of all new installations, or modifications of existing installations, utilizing ionizing radiation shall be submitted to a Qualified Expert for review. The required information is denoted in R313-28-200 and R313-28-450.

(2) A copy of the Qualified Expert's conclusions regarding shielding specifications must be submitted to the Director within 14 working days.

(3) The Director may require additional modifications should a subsequent analysis of operating conditions, for example, a change in workload or use and occupancy factors, indicate the possibility of an individual receiving a dose in excess of the limits prescribed in R313-15.

R313-28-35. General Requirements for Diagnostic X-Ray Systems.

In addition to other requirements of R313-28, all diagnostic x-ray systems shall meet the following requirements:

(1) Warning label. The control panel containing the main power switch shall bear the warning statement, legible and accessible to view: "WARNING: This x-ray unit may be dangerous to patient and operator unless safe exposure factors and operating instructions are observed."

(2) Battery charge indicator. On battery powered generators, visual means shall be provided on the control panel to indicate whether the battery is in a state of charge adequate for proper operation.

(3) Leakage radiation from the diagnostic source assembly. The leakage radiation from the diagnostic source assembly measured at a distance of one meter in any direction from the source shall not exceed 25.8 $\mu\text{C/kg}$ (100 milliroentgens) in one hour when the x-ray tube is operated at its leakage technique factors.

(4) Radiation from components other than the diagnostic source assembly. The radiation emitted by a component other than the diagnostic source assembly shall not exceed 0.516 $\mu\text{C/kg}$ (two milliroentgens) in one hour at five centimeters from accessible surfaces of the component when it is operated in an assembled x-ray system under the conditions for which it was designed. Compliance shall be determined by measurements averaged over an area of 100 square centimeters with no linear dimension greater than 20 centimeters.

(5) Beam quality.

(a) The half value layer of the useful beam for a given x-ray tube potential shall not be less than the values shown in R313-28-35, Table I. If it is necessary to determine such half-value layer at an x-ray tube potential which is not listed in Table I, linear interpolation or extrapolation may be made.

TABLE I

DESIGN OPERATING RANGE (KILO VOLTS PEAK)	MEASURED POTENTIAL (KILOVOLTS PEAK)	DENTAL INTRA-ORAL MANUFACTURED BEFORE AUGUST 1, 1974 AND ON OR AFTER DECEMBER 1, 1980	ALL OTHER DIAGNOSTIC X-RAY SYSTEMS
Below 51	30	(use prohibited)	0.3
	40	(use prohibited)	0.4
	50	1.5	0.5
	51	1.5	1.2
	60	1.5	1.3
	70	1.5	1.5
Above 70	71	2.1	2.1
	80	2.3	2.3
	90	2.5	2.5
	100	2.7	2.7
	110	3.0	3.0
	120	3.2	3.2
	130	3.5	3.5
	140	3.8	3.8
	150	4.1	4.1

(b) For capacitor discharge equipment, compliance with the requirements of R313-28-35(5)(a) shall be determined with the system fully charged and a setting of 10 mAs for exposures.

(c) The required minimal half-value layer of the useful beam shall include the filtration contributed by materials which are permanently present between the focal spot of the tube and the patient.

(d) Filtration control. For x-ray systems which have variable kVp and variable filtration for the useful beam, a device shall link the kVp selector with the filters and shall prevent an exposure unless the minimum amount of filtration necessary to produce the HVL required by R313-28-35(5)(a) is in the useful beam for the given kVp which has been selected.

(6) Multiple tubes. When two or more radiographic tubes are controlled by one exposure switch, the tube or tubes which have been selected shall be clearly indicated prior to initiation of the exposure. For equipment manufactured after August 1, 1974, indications shall be both on the x-ray control panel and at or near the tube housing assembly which has been selected.

(7) Mechanical support of tube head. The tube housing assembly supports shall be adjusted so that the tube housing assembly will remain stable during an exposure unless the tube housing movement during exposure is a designed function of the x-ray system.

(8) Technique indicators.

(a) The technique factors to be used during an exposure shall be indicated before the exposure begins, except when automatic EXPOSURE controls are used, in which case the technique factors which are set prior to the exposure shall be indicated.

(b) On equipment having fixed technique factors, the requirements, in R313-28-35(8)(a) may be met by permanent markings. Indication of technique factors shall be visible from the operator's position except in the case of spot films made by the fluoroscopist.

(9) Maintaining compliance. Diagnostic x-ray systems and their associated components certified pursuant to the provisions of 21 CFR Part 1020 (2006) shall be maintained in compliance with applicable requirements of that standard.

(10) Locks. All position locking, holding, and centering devices on x-ray system components and systems shall function as intended.

(11) X-ray systems which have been granted a variance by the Director, Center for Devices and Radiological Health, Food and Drug Administration (Director), from the performance standards for ionizing radiation emitting products, in accordance with 21 CFR 1010.4 (2006) shall be deemed to satisfy the requirements in R313-28 that

correspond to the variance granted by the Director. The registrant shall insure that labeling pursuant to 21 CFR 1010.5(f) (2006) remains legible and visible on the x-ray system.

R313-28-40. Fluoroscopic X-Ray Systems.

All fluoroscopic x-ray systems used shall be image intensified and meet the following requirements:

(1) Primary barrier.

(a) The fluoroscopic imaging assembly shall be provided with a primary protective barrier which intercepts the entire cross section of the useful beam at SIDs for which the unit was designed.

(b) The x-ray tube used for fluoroscopy shall not produce x-rays unless the barrier is in position to intercept the entire useful beam.

(2) Fluoroscopic beam limitation.

(a) For certified fluoroscopic systems with or without a spot film device neither the length nor the width of the x-ray field in the plane of the image receptor shall exceed that of the visible area of the image receptor by more than three percent of the SID. The sum of the excess length and the excess width shall be no greater than four percent of the SID.

(b) For uncertified fluoroscopic systems with a spot film device, the x-ray beam with the shutters fully open, during fluoroscopy or spot filming, shall be no larger than the largest image receptor size for which the device is designed. Measurements shall be made at the minimum SID available but at no less than 20 centimeters table top to the film plane distance.

(c) For uncertified fluoroscopic systems without a spot film device, the requirements of R313-28-40(1) apply.

(d) Other requirements for fluoroscopic beam limitation:

(i) means shall be provided to permit further limitation of the field. Beam-limiting devices manufactured after May 22, 1979, and incorporated in equipment with a variable SID or visible area of greater than 300 square centimeters shall be provided with means for stepless adjustment of the x-ray field;

(ii) equipment with a fixed SID and a visible area of 300 square centimeters or less shall be provided with either stepless adjustment of the x-ray field or with means to further limit the x-ray field size at the plane of the image receptor to 125 square centimeters or less;

(iii) if provided, stepless adjustment shall at the greatest SID, provide continuous field sizes from the maximum attainable to a field size of five centimeters by five centimeters or less;

(iv) for equipment manufactured after February 25, 1978, when the angle between the image receptor and beam axis is variable, means shall be provided to indicate when the axis of the x-ray beam is perpendicular to the plane of the image receptor; and

(v) for non-circular x-ray fields used with circular image receptors, the error in alignment shall be determined along the length and width dimensions of the x-ray field which pass through the center of the visible area of the image receptor.

(3) Spot-film beam limitation. Spot-film devices shall meet the following requirements:

(a) means shall be provided between the source and the patient for adjustment of the x-ray field size in the plane of the film to the size of that portion of the film which has been selected on the spot film selector. Adjustments shall be automatically accomplished except when the x-ray field size in the plane of the film is smaller than that of the selected portion of the film. For spot film devices manufactured after June 21, 1979, if the x-ray field size is less than the size of the selected portion of the film, the means for adjustment of the field size shall be only at the operator's option;

(b) neither the length nor the width of the x-ray field in the plane of the image receptor shall differ from the corresponding dimensions of the selected portion of the image receptor by more than three percent of the SID when adjusted for full coverage of the selected portion of the image receptor. The sum, without regard to sign, of the length and width differences shall not exceed four percent of the SID;

(c) it shall be possible to adjust the x-ray field size in the plane of the film to a size smaller than the selected portion of the film. The minimum field size at the greatest SID shall be equal to, or less than, five by five centimeters;

(d) the center of the x-ray field in the plane of the film shall be aligned with the center of the selected portion of the film to within two percent of the SID; and

(e) on spot film devices manufactured after February 25, 1978, if the angle between the plane of the image receptor and beam axis is variable, means shall be provided to indicate when the axis of the x-ray beam is perpendicular to the plane of the image receptor, and compliance shall be determined with the beam axis indicated to be perpendicular to the plane of the image receptor.

(4) Override. If a means exists to override the automatic x-ray field size adjustments required in R313-28-40(2) and (3), that means:

(a) shall be designed for use only in the event of system failure;

(b) shall incorporate a signal visible at the fluoroscopist's position which will indicate whenever the automatic field size adjustment is overridden; and

(c) shall be clearly and durably labeled as follows: FOR X-RAY FIELD LIMITATION SYSTEM FAILURE.

(5) Activation of the fluoroscopic tube. X-ray production in the fluoroscopic mode shall be controlled by a dead-man switch. When recording serial fluoroscopic images, the fluoroscopist shall be able to terminate the x-ray exposure immediately, but means may be provided to permit completion of a single exposure of the series in process.

(6) Entrance EXPOSURE rate allowable limits.

(a) For fluoroscopic equipment manufactured before May 19, 1995, the following requirements apply:

(i) fluoroscopic equipment which is provided with automatic exposure rate control shall not be operable at combinations of tube potential and current which will result in an EXPOSURE rate in excess of 2.58 mC/kg (ten roentgens) per minute at the point where the center of the useful beam enters the patient, except:

(A) during recording of fluoroscopic images, or

(B) when an optional high level control is provided.

When so provided, the equipment shall not be operable at combinations of tube potential and current which will result in an EXPOSURE rate in excess of 1.29 mC/kg (five roentgens) per minute at the point where the center of the useful beam enters the patient unless the high level control is activated. Special means of activation of high level controls shall be required. The high level control shall be operable only when continuous manual activation is provided by the operator. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.

(ii) fluoroscopic equipment which is not provided with automatic exposure rate control shall not be operable at combinations of tube potential and current which will result in a EXPOSURE rate in excess of 1.29 mC/kg (five roentgens) per minute at the point where the center of the useful beam enters the patient, except:

(A) during recording of fluoroscopic images, or

(B) when an optional high level control is activated.

Special means of activation of high level controls shall be required. The high level control shall be operable only when continuous manual activation is provided by the operator. A

continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.

(iii) fluoroscopic equipment which is provided with both automatic exposure rate control and a manual mode shall not be operable at combinations of tube potential and current that will result in an exposure rate of 2.58 mC/kg (ten roentgens) per minute in either mode at the point where the center of the useful beam enters the patient except:

(A) during recording of fluoroscopic images, or

(B) when an optional high level control is provided.

When so provided, the equipment shall not be operable at combinations of tube potential and current which will result in an EXPOSURE rate in excess of 1.29 mC/kg (five roentgens) per minute at the point where the center of the useful beam enters the patient unless the high level control is activated. Special means of activation of high level controls shall be required. The high level control shall be operable only when continuous manual activation is provided by the operator. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.

(b) For fluoroscopic equipment manufactured on and after May 19, 1995, the following requirements apply:

(i) fluoroscopic equipment operable at combinations of tube potential and current which will result in an EXPOSURE rate greater than 1.29 mC/kg (five roentgens) per minute at the point where the center of the useful beam enters the patient shall be equipped with automatic exposure rate control. Provision for manual selection of technique factors may be provided.

(ii) fluoroscopic equipment shall not be operable at combinations of tube potential and current which will result in an EXPOSURE rate in excess of 2.58 mC/kg (ten roentgens) per minute at the point where the center of the useful beam enters the patient except:

(A) during recording of images from an x-ray image-intensifier tube using photographic film or a video camera when the x-ray source is operated in pulsed mode, or

(B) when an optional high level control is activated.

When the high level control is activated, the equipment shall not be operable at combinations of tube potential and current which will result in an EXPOSURE rate in excess of 5.16 mC/kg (20 roentgens) per minute at the point where the center of the useful beam enters the patient. Special means of activation of high level controls shall be required. The high level control shall be operable only when continuous manual activation is provided by the operator. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.

(c) Compliance with the requirements of R313-28-40(6) shall be determined as follows:

(i) if the source is below the x-ray table, the EXPOSURE rate shall be measured one centimeter above the tabletop or cradle;

(ii) if the source is above the x-ray table, the EXPOSURE rate shall be measured at 30 centimeters above the tabletop with the end of the beam-limiting device or spacer positioned as closely as possible to the point of measurement;

(iii) for a C-arm type of fluoroscope, the exposure rate shall be measured 30 centimeters from the input surface of the fluoroscopic imaging assembly, with the source positioned at available SID's, provided that the end of the beam-limiting device or spacer is no closer than 30 centimeters from the input surface of the fluoroscopic imaging assembly; or

(iv) for a lateral type fluoroscope, the exposure rate shall be measured at a point 15 centimeters from the centerline of the x-ray table and in the direction of the x-ray source with the end of the beam-limiting device or spacer positioned as close as possible to the point of measurement.

If the tabletop is movable, it shall be positioned as close as possible to the lateral x-ray source with the end of the beam-limiting device or spacer no closer than 15 centimeters to the x-ray table.

(d) Fluoroscopic radiation therapy simulation systems are exempt from the requirements of R313-28-40(6).

(7) Measurement of entrance EXPOSURE rates shall be performed for both maximum and typical values as follows:

(a) measurements shall be made annually or after maintenance of the system which might affect the EXPOSURE rate;

(b) results of these measurements shall be posted where the fluoroscopist may have ready access to the results while using the fluoroscope and in the record required in R313-28-31(3)(b). The measurement results shall be stated in roentgens per minute and include the machine settings used in determining results. The name of the person performing the measurements and the date the measurements were performed shall be included in the results;

(c) conditions of the annual measurement of maximum entrance EXPOSURE rate shall be performed as follows:

(i) the measurement shall be made under the conditions that satisfy the requirements of R313-28-40(6)(c);

(ii) the kVp, mA, and other selectable parameters shall be adjusted to those settings which give the maximum entrance EXPOSURE rate; and

(iii) x-ray systems that incorporate automatic exposure rate control shall have sufficient attenuative material placed in the useful beam to produce the maximum output of that system; and

(d) conditions of the annual measurement of typical entrance EXPOSURE rate are as follows:

(i) the measurement shall be made under the conditions that satisfy the requirements of R313-28-40(6)(c);

(ii) the kVp, mA, and other selectable parameters shall be those settings typical of clinical use of the x-ray system; and

(iii) the x-ray system that incorporates automatic EXPOSURE rate control shall have an appropriate phantom placed in the useful beam to produce a milliamperage and kilovoltage typical of the use of the x-ray system.

(8) Barrier transmitted radiation rate limits.

(a) The EXPOSURE rate due to transmission through the primary protective barrier with the attenuation block in the useful beam, combined with radiation from the image intensifier, if provided, shall not exceed 0.516 uC/kg (two milliroentgens) per hour at ten centimeters from accessible surfaces of the fluoroscopic imaging assembly beyond the plane of the image receptor for each mC/kg (roentgen) per minute of entrance EXPOSURE rate.

(b) Measuring compliance of barrier transmission.

(i) The EXPOSURE rate due to transmission through the primary protective barrier combined with radiation from the image intensifier shall be determined by measurements averaged over an area of 100 square centimeters with no linear dimension greater than 20 centimeters.

(ii) If the source is below the tabletop, the measurement shall be made with the input surface of the fluoroscopic imaging assembly positioned 30 centimeters above the tabletop.

(iii) If the source is above the tabletop and the SID is variable, the measurement shall be made with the end of the beam-limiting device or spacer as close to the tabletop as it can be placed, provided that it shall not be closer than 30 centimeters.

(iv) Movable grids and compression devices shall be removed from the useful beam during the measurement.

(9) Indication of potential and current. During fluoroscopy and cinefluorography, x-ray tube potential and

current shall be continuously indicated.

(10) Source-skin distance. The source to skin distance shall not be less than:

(a) 38 centimeters on stationary fluoroscopic systems manufactured on or after August 1, 1974;

(b) 35.5 centimeters on stationary fluoroscopic systems manufactured prior to August 1, 1974;

(c) 30 centimeters on all mobile fluoroscopes; or

(d) 20 centimeters for all mobile fluoroscopes when used for specific surgical applications.

(11) Fluoroscopic timer.

(a) Means shall be provided to preset the cumulative on-time of the fluoroscopic x-ray tube. The maximum cumulative time of the timing device shall not exceed five minutes without resetting.

(b) A signal audible to the fluoroscopist shall indicate the completion of a preset cumulative on-time. The signal shall continue to sound while x-rays are produced until the timing device is reset.

(12) Control of scatter radiation.

(a) The tables of fluoroscopic assemblies when combined with normal operating procedures shall provide protection from scatter radiation so that unprotected parts of a staff or ancillary individual's body shall not be exposed to unattenuated scattered radiation which originates from under the table. The attenuation required shall be not less than 0.25 mm lead equivalent.

(b) Equipment configuration when combined with procedures shall not allow portions of a staff member's or ancillary person's body, except the extremities, to be exposed to unattenuated scattered radiation emanating from above the tabletop unless:

(i) the radiation has passed through not less than 0.25 mm lead equivalent material including, but not limited to, drapes, bucky-slot cover panel, or self supporting curtains, in addition to the lead equivalency provided by the protective apron referred to in R313-28-31(2)(d),

(ii) that individual is at least 120 centimeters from the center of the useful beam, or

(iii) it is not feasible to attach shielding to special procedures equipment and personnel are wearing protective aprons.

(13) Spot film exposure reproducibility. Fluoroscopic systems equipped with radiographic spot film mode shall meet the exposure reproducibility requirements of R313-28-54.

(14) Radiation therapy simulation systems. Radiation therapy simulation systems shall be exempt from all the requirements R313-28-40(1), (8), and (11) provided that:

(a) the systems are designed and used in such a manner that no individual other than the patient is in the x-ray room during periods of time when the system is producing x-rays; and

(b) the systems which do not meet the requirements of R313-28-40(11) are provided with a means of indicating the cumulative time that an individual patient has been exposed to x-rays. Procedures shall require, in these cases, that the timer be reset between examinations.

R313-28-51. Radiographic Systems Other than Fluoroscopic, Dental Intraoral, or Computed Tomography -- Beam Limitation.

The useful beam shall be limited to the area of clinical interest and show evidence of collimation. This shall be deemed to have been met if a positive beam limiting device meeting the manufacturer's specifications or the requirements of R313-28-300 has been properly used or if evidence of collimation is shown on at least three sides or three corners of the film, for example, projections of the shutters of the

collimator, cone cutting at the corners or a border at the film's edge.

(1) General purpose stationary and mobile x-ray systems.

(a) Only x-ray systems provided with a means for independent stepless adjustment of at least two dimensions of the x-ray field shall be used.

(b) A method shall be provided for visually defining the perimeter of the x-ray field. The total misalignment of the edges of the visually defined field with the respective edges of the x-ray field along either the length or width of the visually defined field shall not exceed two percent of the distance from the source to the center of the visually defined field when the surface upon which it appears is perpendicular to the axis of the x-ray beam.

(c) The Board may grant an exemption on non-certified x-ray systems to R313-28-51(1)(a) and (b) provided the registrant makes a written application for the exemption and in that application:

(i) demonstrates it is impractical to comply with R313-28-51(1)(a) and (b); and

(ii) demonstrates the purpose of R313-28-51(1)(a) and (b) will be met by other methods.

(2) In addition to the requirements of R313-28-51(1) above, stationary general purpose x-ray systems, both certified and non-certified shall meet the following requirements:

(a) a method shall be provided to indicate when the axis of the x-ray beam is perpendicular to the plane of the image receptor, to align the center of the x-ray field with respect to the center of the image receptor to within two percent of the SID, and to indicate the SID to within two percent;

(b) the beam-limiting device shall numerically indicate the field size in the plane of the image receptor to which it is adjusted; and

(c) indication of field size dimensions and SID's shall be specified in inches or centimeters and shall be such that aperture adjustments result in x-ray field dimensions in the plane of the image receptor which correspond to those of the image receptor to within two percent of the SID when the beam axis is perpendicular to the plane of the image receptor.

(3) Radiographic equipment designed for only one image receptor size at a fixed SID shall be provided with means to limit the field at the plane of the image receptor to dimensions no greater than those of the image receptor, and to align the center of the x-ray field with the center of the image receptor to within two percent of the SID, or shall be provided with means to both size and align the x-ray field so that the x-ray field at the plane of the image receptor does not extend beyond the edges of the image receptor.

(4) Special purpose x-ray systems.

(a) Means shall be provided to limit the x-ray field in the plane of the image receptor so that the x-ray field does not exceed each dimension of the image receptor by more than two percent of the SID when the axis of the x-ray beam is perpendicular to the plane of the image receptor.

(b) Means shall be provided to align the center of the x-ray field with the center of the image receptor to within two percent of the SID, or means shall be provided to both size and align the x-ray field so that the x-ray field at the plane of the image receptor does not extend beyond the edges of the image receptor. Compliance shall be determined with the axis of the x-ray beam perpendicular to the plane of the image receptor.

(c) R313-28-51(4)(a) and R313-28-51(4)(b) may be met with a system that meets the requirements for a general purpose x-ray system as specified in R313-28-51(1) or, when alignment means are also provided, may be met with either;

(i) an assortment of removable, fixed-aperture, beam-

limiting devices sufficient to meet the requirements for the combination of image receptor sizes and SID's for which the unit is designed with the beam limiting device having clear and permanent markings to indicate the image receptor size and SID for which it is designed; or

(ii) a beam-limiting device having multiple fixed apertures sufficient to meet the requirement for the combinations of image receptor sizes and SID's for which the unit is designed. Permanent, clearly legible markings shall indicate the image receptor size and SID for which the aperture is designed and shall indicate which aperture is in position for use.

R313-28-52. Radiographic Systems Other Than Fluoroscopic, Dental Intraoral, or Computed Tomography -- Radiation Exposure Control Devices.

(1) Exposure Initiation. Means shall be provided to initiate the radiation exposure by a deliberate action on the part of the operator, for example, the depression of a switch. Radiation exposure shall not be initiated without a deliberate action. In addition, it shall not be possible to initiate an exposure when the timer is set to a "zero" or "off" position if either position is provided.

(2) Exposure termination. Means shall be provided to terminate the exposure at a preset time interval, preset product of current and time, a preset number of pulses, or a preset radiation exposure to the image receptor. Except for dental panoramic systems, termination of an exposure shall cause automatic resetting of the timer to its initial setting or to "zero."

(3) Manual Exposure Control: An x-ray control shall be incorporated into x-ray systems so that an exposure can be terminated at times except for:

(a) exposure of one-half second or less; or

(b) during serial radiography when means shall be provided to permit completion of a single exposure of the series in process.

(4) Automatic EXPOSURE controls, phototimers. When automatic EXPOSURE control is provided:

(a) indication shall be made on the control panel when this mode of operation is selected;

(b) when the x-ray tube potential is equal to or greater than 51 kVp, the minimum exposure time for field emission equipment rated for pulsed operation shall be equal to or less than the interval equivalent to two pulses; and

(c) the minimum exposure time for all equipment other than that specified in R313-28-52(4)(b) shall be equal to or less than 1/60 second or a time interval required to deliver five mAs, whichever is greater.

(5) Exposure Indication. Means shall be provided for visual indication observable at or from the operator's protected position whenever x-rays are produced. In addition, a signal audible to the operator shall indicate that the exposure has terminated.

(6) Exposure Duration, Timer, Linearity. For systems having independent selection of exposure time settings, the average ratio of exposure to the indicated milliampere-seconds product obtained at two consecutive timer settings or at two settings not differing by more than a factor of two shall not differ by more than 0.10 times their sum.

(7) Exposure Control Location. The x-ray exposure control shall be placed so that the operator can view the patient while making the exposure.

(8) Operator Protection.

(a) Stationary x-ray systems shall be required to have the x-ray exposure switch permanently mounted in a protected area.

(b) Mobile and portable x-ray systems which are:

(i) used continuously for greater than one week at the

same location, one room or suite, shall meet the requirements of R313-28-52(8)(a); or

(ii) used for less than one week at one location, one room, or suite shall be provided with either a protective barrier at least two meters (6.5 feet) high for operator protection during exposures, or means shall be provided to allow the operator to be at least 2.7 meters (nine feet) from the tube housing assembly during the exposure.

R313-28-53. Radiographic Systems Other Than Fluoroscopic, or Dental Intraoral Systems -- Source-to-Skin or Receptor Distance.

Mobile or portable radiographic systems shall be provided with a means to limit the source-to-skin distance to 30 or more centimeters.

R313-28-54. Radiographic Systems Other Than Fluoroscopic, or Dental Intraoral Systems -- Exposure Reproducibility.

When technique factors, including control panel selections associated with automatic exposure control systems, are held constant the coefficient of variation of exposure for both manual and automatic exposure control systems shall not exceed 0.05. This requirement applies to clinically used techniques.

R313-28-55. Radiographic Systems - Standby Radiation From Capacitor Discharge Equipment.

Radiation emitted from the x-ray tube when the system is fully charged and the exposure switch or timer is not activated shall not exceed a rate of 0.516 $\mu\text{C/kg}$ (two milliroentgens) per hour at five centimeters from accessible surfaces of the diagnostic source assembly, with the beam-limiting device fully open.

R313-28-56. Radiographic Systems Other Than Fluoroscopic, or Dental Intraoral Systems -- Accuracy.

Deviation of measured technique factors from indicated values of kVp and exposure time shall not exceed the limits specified for that system by its manufacturer. In the absence of manufacturer's specifications, the deviation shall not exceed ten percent of the indicated value for kVp and ten percent of the indicated value for times greater than 50 milliseconds.

R313-28-57. Radiographic Systems Other Than Fluoroscopic, or Dental Intraoral Systems -- mA/mAs Linearity.

The following requirements apply when the equipment is operated on a power supply as specified by the manufacturer for fixed x-ray tube potentials within the range of 40 percent to 100 percent of the maximum rated potentials.

(1) Equipment having independent selection of x-ray tube current, mA. Where the tube current is continuous, the average ratios of exposure to the indicated milliamperereconds product, C/kg/mAs or mR/mAs , obtained at two consecutive tube current settings or at two settings differing by no more than a factor of two shall not differ by more than 0.10 times their sum.

(2) Equipment having a combined x-ray tube current-exposure time product, mAs, selector, but not a separate tube current, mA, selector. Where the tube current is continuous, the average ratios of exposure to the indicated milliamperereconds product, C/kg/mAs or mR/mAs , obtained at two consecutive milliamperereconds settings or at two settings differing by no more than a factor of two shall not differ by more than 0.10 times their sum.

R313-28-80. Intraoral Dental Radiographic Systems.

In addition to the provisions of R313-28-31, R313-28-32 and R313-28-35, the requirements of this section apply to x-ray equipment and associated facilities used for dental radiography. Criteria for extraoral dental radiographic systems are covered in R313-28-51, R313-28-52 and R313-28-53. Intraoral dental radiographic systems used must meet the requirements of R313-28-80.

(1) Source-to-Skin distance (SSD). X-ray systems designed for use with an intraoral image receptor shall be provided with means to limit source-to-skin distance to not less than:

- (a) 18 centimeters if operable above 50 kilovolts peak, or
- (b) 10 centimeters if not operable above 50 kilovolts peak.

(2) Field limitation. Radiographic systems designed for use with an intraoral image receptor shall be provided with means to limit the x-ray field so that:

(a) if the minimum source-to-skin distance (SSD) is 18 centimeters or more, the x-ray field, at the minimum SSD, shall be containable in a circle having a diameter of no more than seven centimeters; and

(b) if the minimum SSD is less than 18 centimeters, the x-ray field, at the minimum SSD, shall be containable in a circle having a diameter of no more than six centimeters.

(3) Exposure Initiation.

(a) Means shall be provided to initiate the radiation exposure by a deliberate action on the part of the operator, for example, the depression of a switch. Radiation exposure shall not be initiated without a deliberate action; and

(b) It shall not be possible to make an exposure when the timer is set to a "zero" or "off" position if either position is provided.

(4) Exposure Termination.

(a) Means shall be provided to terminate the exposure at a preset time interval, preset product of current and time, a preset number of pulses, or a preset radiation exposure to the image receptor.

(b) An x-ray exposure control shall be incorporated into x-ray systems so that an exposure of more than 0.5 seconds can be terminated immediately by the operator.

(c) Termination of an exposure shall cause automatic resetting of the timer to its initial setting or to "zero."

(5) Exposure Indication. Means shall be provided for visual indication, observable from the operator's protected position, whenever x-rays are produced. In addition, a signal audible to the operator shall indicate that the exposure has terminated.

(6) Timer Linearity. For systems having independent selection of exposure time settings, the average ratio of exposure to the indicated milliamperereconds product obtained at two consecutive timer settings or at two settings not differing by more than a factor of two shall not differ by more than 0.10 times their sum.

(7) Exposure Control Location and Operator Protection.

(a) Stationary x-ray systems shall be required to have the x-ray exposure control mounted in a protected area or a means to allow the operator to be at least 2.7 meters (9.0 feet) from the tube housing assembly while making exposures; and

(b) Mobile and portable x-ray systems which are:

(i) used for greater than one week in the same location, for example, a room or suite, shall meet the requirements of R313-28-80(7)(a); or

(ii) used for less than one week in the same location shall be provided with either a protective barrier at least two meters high for operator protection, or means to allow the operator to be at least 2.7 meters (nine feet) from the tube housing assembly while making exposures.

(8) Exposure Reproducibility. When all technique

factors are held constant, the coefficient of variation of exposure shall not exceed 0.05 for certified x-ray systems or 0.10 for non-certified x-ray systems. This requirement applies to clinically used techniques.

(9) mA/mAs Linearity. The following requirements apply when the equipment is operated on a power supply as specified by the manufacturer for fixed x-ray tube potentials within the range of 40 to 100 percent of the maximum rated potentials.

(a) For equipment having independent selection of x-ray tube current, the average ratios of exposure to the indicated milliamperere-seconds product obtained at two consecutive tube current settings or, when the tube current selection is continuous, two settings differing by no more than a factor of two shall not differ by more than 0.10 times their sum.

(b) For equipment having a combined x-ray tube current-exposure time product selector but not a separate tube current selector, the average ratios of exposure to the indicated milliamperere-seconds product obtained at two consecutive mAs selector settings, or when the mAs selector provides continuous selection, at two settings differing by no more than a factor of two shall not differ by more than 0.10 times their sum.

(10) Accuracy. Deviation of technique factors from indicated values shall not exceed the limits specified for that system by its manufacturer. In the absence of manufacturer's specifications the deviation shall not exceed ten percent of the indicated value.

(11) Administrative Controls.

(a) Patient and film holding devices shall be used when the technique permits and holding is required.

(b) The x-ray tube housing and the position indicating device shall not be hand-held during an exposure.

(c) The x-ray system shall be operated so that the useful beam at the patient's skin does not exceed the requirements of R313-28-80(2).

(d) Dental fluoroscopy without image intensification shall not be used.

(12) Hand-held Portable Dental X-ray Systems.

(a) X-ray equipment designed to be hand-held shall comply with Section R313-28-31, excluding Subsection R313-28-31(5), and with Section R313-28-80, excluding Subsections R313-28-80(7)(b) and R313-28-80(11)(b).

(b) Protective shielding of at least 0.5 millimeter lead equivalence shall be provided for the operator to protect the operator's torso, hands, face, and gonads from backscatter radiation. If the protective shielding is a backscatter shield attached to the x-ray unit, the shield shall be positioned as close to the patient as possible and the operator shall take care to remain in a protective position.

(c) Portable radiation machines designed to be hand-held are exempt from Subsection R313-28-35(7). The portable radiation machines shall be held by the tube housing support or handle and shall be used in accordance with the manufacturer's operating procedures.

(d) In addition to the requirements of Subsection R313-28-350(1), each operator shall complete the training program supplied by the manufacturer prior to using the x-ray unit. Records of training shall be maintained on file for examination by an authorized representative of the Director.

R313-28-120. Mammography X-Ray Systems - Equipment Design and Performance Standards.

Only x-ray equipment meeting the following standards shall be used for mammography examinations.

(1) Equipment Design.

(a) FDA Standards. The requirements of 21 CFR 1020.30 and 21 CFR 1020.31 (2006) are adopted and incorporated by reference.

(b) Dedicated Equipment. The x-ray equipment shall be specifically designed for mammography.

(c) Compression. Devices parallel to the imaging plane shall be available to immobilize and compress the breast during mammography procedures.

(d) Image Receptor. The x-ray equipment shall have both an 18 cm by 24 cm and a 24 cm by 30 cm image receptor and moving grids matched to each image receptor size.

(e) Automatic Exposure Control. X-ray equipment used in healing arts screening shall have automatic exposure control capabilities with a post exposure meter which indicates either milliamperere-seconds or time values.

(f) Focal Spot. The focal spot size and source to image receptor distance configurations shall be limited to those appropriate for mammography.

(g) Beam Limitation. The x-ray equipment must allow for the x-ray field to extend to or beyond the chest wall edge of the image receptor.

(h) Magnification. X-ray equipment used in a noninvasive manner, requiring techniques beyond those utilized in standard mammography of asymptomatic patients, shall have x-ray magnification capability for noninvasive procedures. The equipment shall be able to provide at least one magnification within the range of 1.4 to 2.0.

(2) Performance Standards.

(a) State Standards. The x-ray equipment shall meet the applicable performance standards in R313-28.

(b) Filtration. The useful beam shall have a half-value layer between the values of the measured kilovolts peak divided by 100 and the measured kilovolts peak divided by 100 plus 0.1 mm of aluminum equivalent. These values are to include the contribution to filtration by the compression device.

(c) Minimum Radiation Output. X-ray equipment installed after the effective date of this rule shall meet the following standard: at 28 kilovolts peak on the focal spot used in routine healing arts screening the x-ray equipment shall be capable of sustaining a minimum output of 500 mR per second for at least three seconds. This output shall be measured at a point 4.5 centimeters from the surface of the patient support device when the source to image receptor distance is at its maximum and the compression paddle is in the beam. Existing x-ray equipment shall meet this minimum radiation output standard within one year of the effective date of this rule.

(d) Exposure Linearity. For kilovolts peak settings used clinically, the exposure per mAs shall be within plus or minus ten percent of the average exposure per mAs for those mAs stations or time stations, if applicable, that are tested.

(e) Automatic Exposure Control. The automatic exposure control mode shall produce consistent film density under changing patient and examination conditions. These conditions include breast thickness, adiposity, kilovolts peak and density settings. This requirement will be deemed satisfied when:

(i) an automatic exposure control technique guide is posted, and

(ii) for a series of films obtained for attenuator thicknesses of two to seven centimeters the resulting radiographic optical densities are within plus or minus 0.2 of the average value when the kVp and density control setting are adjusted as indicated on the technique guide. The attenuator used for determining compliance shall be either acrylic or other tissue equivalent material.

(f) Patient Dose. The x-ray equipment must be capable of giving an average glandular dose to an average size breast of average tissue density that does not exceed 3.0 mGy (0.3 rad) with a grid or 1.0 mGy (0.1 rad) without a grid. This will be deemed satisfied when using an acrylic phantom of 4.5 cm

thickness. In addition, under all clinical use conditions, the average glandular dose to the breast must be less than 5.0 mGy (0.5 rad) per film for healing arts screening procedures.

(3) Mammography X-ray Equipment Quality Control.

(a) Initial Installation. Upon completion of the initial installation of the x-ray equipment, and before it is commissioned for clinical use, the equipment shall be evaluated by a mammography imaging medical physicist who has been approved by the Board. The evaluation results shall be submitted to the Director for review and approval.

(b) Annual Evaluation. At intervals not to exceed 12 months or at the request of the Director, the x-ray equipment shall be evaluated by a mammography imaging medical physicist who has been approved by the Board.

(c) The registrant shall develop and implement a quality control testing procedure for monitoring the radiation performance of the x-ray equipment.

R313-28-140. Qualifications of Mammography Imaging Medical Physicist.

An individual seeking certification by the Board for approval as a mammography imaging medical physicist shall file an application for certification on forms furnished by the Division. The Board may certify individuals who meet the requirements for initial qualifications. To remain certified by the Board as a mammography imaging medical physicist, an individual shall satisfy the requirements for continuing qualifications.

(1) Initial qualifications.

(a) Be certified by the American Board of Radiology in Radiological Physics or Diagnostic Radiological Physics, or the American Board of Medical Physicists in Diagnostic Imaging Physics; or

(b) Satisfy the following educational and experience requirements:

(i) Have a master's or higher degree from an accredited university or college in physical sciences; and

(ii) Have two years full-time experience conducting mammography surveys. Five mammography surveys shall be equal to one year full-time experience.

(2) Continuing qualifications.

(a) During the three-year period after initial certification and for each subsequent three-year period, the individual shall earn 15 hours of continuing educational credits in mammography imaging; and

(b) Perform at least two mammography surveys during the 12-month period from June 1 and May 31 to remain certified by the Board.

(3) Mammography imaging medical physicists who fail to maintain the required continuing qualifications stated in R313-28-140(2) shall re-establish their qualifications before independently surveying another mammography facility. To re-establish their qualifications, mammography imaging physicists who fail to meet:

(a) The continuing education requirements of R313-28-140(2)(a) must obtain a sufficient number of continuing educational credits to bring their total credits up to the required 15 in the previous three years.

(b) The continuing experience requirement of R313-28-140(2)(b) must obtain experience by surveying two mammography facilities for each year of not meeting the continuing experience requirements under the supervision of a mammography imaging medical physicist approved by the Board.

R313-28-160. Computed Tomography X-ray Equipment.

(1) Equipment Requirements.

(a) In the event of equipment failure affecting data collection, means shall be provided to terminate the x-ray

exposure automatically by either de-energizing the x-ray source or intercepting the x-ray beam with a shutter mechanism through the use of either a back-up timer or devices which monitor equipment function.

(b) A visible signal shall indicate when the x-ray exposure has been terminated through the means required by R313-28-160 (1)(a).

(c) The operator shall be able to terminate the x-ray exposure at any time during a scan, or series of scans, of greater than 0.5 second duration.

(2) Tomographic Plane Indication and Alignment.

(a) Means shall be provided to permit visual determination of the location of a reference plane. This reference plane can be offset from the location of the tomographic plane.

(b) If a device using a light source is used to satisfy R313-28-160 (2)(a), the light source shall provide illumination at levels sufficient to permit visual determination of the location of the tomographic plane or reference plane.

(c) The total error in the indicated location of the tomographic plane or reference plane shall not exceed 5 millimeters.

(3) Beam-On and Shutter Status Indicators.

(a) The computed tomography (CT) x-ray control panel and CT gantry shall provide visual indication whenever x-rays are produced and, if applicable, whether the shutter is open or closed.

(b) Each emergency button or switch shall be clearly labeled as to its function.

(4) Indication of CT Conditions of Operation.

(a) The CT x-ray system shall be designed such that technique factors, tomographic section thickness, and scan increment shall be indicated prior to the initiation of a scan or series of scans.

(5) Quality Assurance Procedures. Quality assurance procedures shall be conducted on the CT x-ray equipment.

(a) The quality assurance procedures shall be in writing. Such procedures shall include, but not be limited to, the following:

(i) Specifications of the tests that are to be performed, including instructions to be employed in the performance of those tests; and

(ii) Specifications of the frequency at which tests are to be performed, the acceptable tolerance for each parameter measured and actions to be taken if tolerances are exceeded.

(b) The parameters measured to satisfy R313-28-160(5)(a)(ii) shall include, but not be limited to, kVp, mA and reproducibility of dose appropriate to the type of CT procedures performed.

(c) Records of tests performed to satisfy the requirements of R313-28-160(5)(a) and (b) shall be maintained for three years for inspection by the Division.

(6) Dose Calibration.

(a) Radiation measurements shall be performed at least annually and after change or replacement of components which could cause a change in the radiation output.

(b) The calibration of the radiation measuring instrument shall be traceable to a national standard and shall be calibrated at intervals not to exceed two years.

(c) Measurements shall be specified in terms of the multiple scan average dose, using phantoms and technique factors appropriate to the type of CT procedures performed.

R313-28-200. Information on Radiation Shielding Required for Plan Reviews.

In order to evaluate a need for radiation shielding associated with a plan review, the following information shall be submitted to a Qualified Expert so that an adequate review may be performed.

- (1) The plans showing, as a minimum, the following:
 - (a) the normal location of the radiation producing equipment's radiation port, the port's travel and traverse limits, general directions of the radiation beam, locations of windows, the location of the operator's booth, and the location of the x-ray control panel;
 - (b) structural composition and thickness of walls, doors, partitions, floor, and ceiling of the rooms concerned;
 - (c) the dimensions, including height, floor to floor, of the rooms concerned;
 - (d) the type of occupancy of adjacent areas inclusive of space above and below the rooms concerned. If there is an exterior wall, show distance to the closest existing occupied areas;
 - (e) the make and model of the x-ray equipment, the maximum energy output, and the energy waveform; and
 - (f) the type of examination or treatment which will be performed with the equipment.
- (2) Information on the anticipated workload of the x-ray systems in mA-minutes per week.
- (3) A report showing all basic assumptions used in the development of the shielding specifications.

R313-28-300. Additional Requirements Applicable to Certified Systems Only.

Diagnostic x-ray systems incorporating one or more certified components shall be required to comply with the following additional requirements which relate to the certified component.

- (1) Beam limitation for stationary and mobile general purpose x-ray systems.
 - (a) There shall be provided a means of stepless adjustment of the size of the x-ray field. The minimum field size at an SID of 100 centimeters shall be equal to or less than five centimeters by five centimeters.
 - (b) When a light localizer is used to define the x-ray field, it shall provide an average illumination of not less than 160 LUX (15 foot-candles) at 100 centimeters or at the maximum SID, whichever is less. The average illumination shall be based upon measurements made in the approximate center of the quadrants of the light field. Radiation therapy simulation systems are exempt from this requirement.
- (2) Beam Limitation for Portable X-ray Systems. Beam limitation for portable x-ray systems shall meet the additional field limitation requirements of R313-28-51(1) or R313-28-300(1).
- (3) Beam limitation and alignment on stationary general purpose x-ray systems equipped with PBL.
 - (a) PBL shall prevent the production of x-rays when:
 - (i) either the length or the width of the x-ray field in the plane of the image receptor differs, except as permitted by R313-28-300(3)(c), from the corresponding image receptor dimensions by more than three percent of the SID; or
 - (ii) the sum of the length and width differences as stated in R313-28-300(3)(a)(i) without regard to sign exceeds four percent of the SID.
 - (b) Compliance with R313-28-300(3)(a) shall be determined when the equipment indicates that the beam axis is perpendicular to the plane of the image receptor. Compliance shall be determined no sooner than five seconds after insertion of the image receptor.
 - (c) The PBL system shall be capable of operation, at the discretion of the operator, so that the field size at the image receptor can be adjusted to a size smaller than the image receptor through stepless adjustment of the field size. The minimum field size at a distance of 100 centimeters shall be equal to or less than five centimeters by five centimeters.
 - (d) The PBL system shall be designed so that if a change in image receptor does not cause an automatic return to PBL

function as described in R313-28-300(3)(a), then change of the image receptor size or SID must cause the automatic return.

- (4) Tube Stands for Portable X-Ray Systems. A tube stand or other mechanical support shall be used for portable x-ray systems, so that the x-ray tube housing assembly need not be hand-held during exposures.

R313-28-350. Qualifications of Operators.

Operators of diagnostic x-ray systems must be licensed to practice in Utah in accordance with Title 58 Chapter 54.

- (1) The registrant shall document that the operator of diagnostic x-ray equipment is trained in the proper choice of technique factors to be used and in the safe and effective operation of the x-ray equipment.

R313-28-400. Information to be Submitted by Persons Proposing to Conduct Healing Art Screening.

- (1) Individuals requesting that the Director approve a healing arts screening program shall submit the following information:
 - (a) name and address of the applicant and, where applicable, the names and addresses of agents within this State;
 - (b) diseases or conditions for which the x-ray examinations are to be used;
 - (c) description, in detail, of the x-ray examinations proposed in the screening program including the frequency of screening and the duration of the entire screening program;
 - (d) description of the population to be examined in the screening program including age, sex, physical condition, and other appropriate information;
 - (e) an evaluation of known alternate methods not involving ionizing radiation which could achieve the goals of the screening program and why these methods are not used in preference to the x-ray examinations; and
 - (f) written evidence that:
 - (i) an Investigational Review Board, which has been approved by the United States Food and Drug Administration, has reviewed and approved the healing arts screening program; or
 - (ii) the United States Food and Drug Administration has approved the use of the x-ray examination for the diseases or conditions of interest.
- (2) The Director shall not approve a request for a healing arts screening program unless the submissions required by R313-28-400(1) are determined by the Director to be complete and adequate.

R313-28-450. Minimum Design Requirements for an X-ray Machine Operator's Booth - New Installations Only.

- (1) Space requirements:
 - (a) The operator shall be allotted not less than 0.70 square meter (7.5 square feet) of unobstructed floor space in the booth.
 - (b) The minimum space as indicated above may be geometric configurations with no dimension of less than 0.61 meters (two feet).
 - (c) The space shall be allotted excluding encumbrances by the console, for example, overhang or cables, or other similar encroachments.
 - (d) The booth shall be located or constructed to ensure that unattenuated primary beam scatter originating on the examination table or at the wall mounted image receptor will not reach the operator's position in the booth.
- (2) Structural Requirements.
 - (a) The booth walls shall be permanently fixed barriers of at least 2.13 meters (seven feet) high.
 - (b) When a door or movable panel is used as an integral

part of the booth shielding, it must have a permissive device which will prevent an exposure when the door or panel is not closed.

(c) Shielding shall be provided to meet the requirements of R313-15.

(3) X-Ray Exposure Control Placement: The x-ray exposure control for the system shall be fixed within the booth and:

(a) shall be at least one meter (40 inches) from points subject to primary beam scatter, leakage or primary beam radiation; and

(b) shall allow the operator to use the majority of the available viewing windows.

(4) Viewing system requirements:

(a) When the viewing system is a window:

(i) the viewing window shall have a visible area of at least 0.09 square meters (one square foot);

(ii) regardless of size or shape, at least 0.09 square meters (one square foot) of the window area must be centered no less than 0.6 meters (two feet) from the open edge of the booth and no less than 1.5 meters (five feet) from the floor; and

(iii) the window shall have at least the same lead equivalence of that required in the booth's wall in which it is mounted.

(b) When the viewing system is by mirrors, the mirrors shall be so located as to accomplish the general requirements of R313-28-450(4)(a).

(c) When the viewing system is by electronic means:

(i) the camera shall be so located as to accomplish the general requirements of R313-28-450(4)(a); and

(ii) there shall be an alternate viewing system as a backup for the primary system.

KEY: dental, X-rays, mammography, beam limitation

March 24, 2015

19-3-104

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19-3-108

R313. Environmental Quality, Radiation Control.**R313-38. Licenses and Radiation Safety Requirements for Well Logging.****R313-38-1. Purpose and Authority.**

(1) Rule R313-38 prescribes requirements for the issuance of a license authorizing the use of licensed materials including sealed sources, radioactive tracers, radioactive markers, and uranium sinker bars in well logging in a single well. This rule also prescribes radiation safety requirements for persons using licensed materials in these operations.

(2) The rules set forth herein are adopted pursuant to the provisions of Subsections 19-3-104(3) and 19-3-104(6).

(3) The provisions and requirements of Rule R313-38 are in addition to, and not in substitution for, the other requirements of these rules. In particular, the provisions of Rules R313-15, R313-18, R313-19, and R313-22 apply to applicants and licensees subject to these rules.

R313-38-2. Scope.

(1) The requirements of Rule R313-38 do not apply to the issuance of a license authorizing the use of licensed material in tracer studies involving multiple wells, such as field flooding studies, or to the use of sealed sources auxiliary to well logging but not lowered into wells.

R313-38-3. Clarifications or Exceptions.

For purposes of Rule R313-38, 10 CFR 39 (2013), is incorporated by reference with the following clarifications or exceptions:

(1) The exclusion of the following 10 CFR sections: 39.1, 39.5, 39.8, 39.11, 39.101, and 39.103;

(2) The exclusion of the following 10 CFR references within 10 CFR 39: Sec. 40.32, and Sec. 70.23;

(3) The exclusion of "licensed material" in 10 CFR 39.2 definitions;

(4) The substitution of the following wording:

(a) License for reference to NRC license;

(b) Utah Radiation Control Rules for the references to:

(i) The Commission's regulations;

(ii) The NRC regulations;

(iii) NRC regulations; and

(iv) Pertinent Federal regulations;

(c) Director for reference to Commission, except as stated in Subsection R313-38-3(4)(d);

(d) Representatives of the Director for the references to the Commission in:

(i) 10 CFR 39.33(d);

(ii) 10 CFR 39.35(a);

(iii) 10 CFR 39.37;

(iv) 10 CFR 39.39(b); and

(v) 10 CFR 39.67(f);

(e) Director for references to:

(i) NRC in:

(A) 10 CFR 39.63(l);

(B) 10 CFR 39.77(c)(1)(i) and (ii); and

(C) 10 CFR 39.77(d)(9); and

(ii) Appropriate NRC Regional Office in:

(A) 10 CFR 39.77(a);

(B) 10 CFR 39.77(c)(1); and

(C) 10 CFR 39.77(d);

(iii) Appropriate NRC Regional Office listed in appendix D of part 20 of this chapter in:

(A) 10 CFR 39.35(d)(2)

(f) Director, the U.S. Nuclear Regulatory Commission or an Agreement State for the references to:

(i) Commission or an Agreement State in:

(A) 10 CFR 39.35(b); and

(B) 10 CFR 39.43(d) and (e); and

(ii) Commission pursuant to Sec. 39.13(c) or by an

Agreement State in:

(A) 10 CFR 39.43(c); and

(B) 10 CFR 39.51;

(g) In 10 CFR 39.35(d)(1), persons specifically licensed by the Director, the U.S. Nuclear Regulatory Commission, or an Agreement State for the reference to an NRC or Agreement State licensee that is authorized;

(h) In 10 CFR 39.75(e), a U.S. Nuclear Regulatory Commission or an Agreement State for the reference to the Agreement State;

(5) The substitution of the following Title R313 references for specific 10 CFR references:

(a) Section R313-12-3 for the reference to Sec. 20.1003 of this chapter;

(b) Section R313-12-54 for the reference to 10 CFR 39.17;

(c) Subsection R313-12-55(1) for the reference to 10 CFR 39.91;

(d) Rule R313-15 for references to:

(i) Part 20; and

(ii) Part 20 of this chapter;

(e) Subsection R313-15-901(1) for the reference to Sec. 20.1901(a);

(f) Section R313-15-906 for the reference to Sec. 20.1906 of this chapter;

(g) Sections R313-15-1201 through R313-15-1203 for the references to:

(i) Secs. 20.2201-20.2202; and

(ii) Sec. 20.2203;

(h) Rule R313-18 for the reference to part 19;

(i) Section R313-19-30 for the reference to Sec. 150.20 of this chapter;

(j) Section R313-19-50 for the references to:

(i) Sec. 30.50; and

(ii) Part 21 of this chapter;

(k) Section R313-19-71 for the reference to Sec. 30.71;

(l) Section R313-19-100 for the references to:

(i) 10 CFR Part 71; and

(ii) Sec. 71.5 of this chapter; and

(m) Section R313-22-33 for the reference to 10 CFR 30.33;

(n) Rules R313-15, R313-18, and R313-38 for corresponding references to:

(i) Parts 19, 20, and 39 of this chapter;

(ii) A copy of parts 19, 20, and 39 of NRC regulations.

KEY: radioactive materials, well logging, surveys, subsurface tracer studies

March 17, 2015

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19-3-104

19-3-108

R357. Governor, Economic Development.
R357-11. Technology Commercialization and Innovation Program (TCIP).

R357-11-1. Purpose.

(1) The purpose of the Technology Commercialization and Innovation Act is to catalyze and enhance growth of technologies by encouraging interdisciplinary research activity and targeted areas, facilitating the transition of technologies out of the higher education to enhance job creation, and to support the commercialization of technologies developed by small businesses to enhance job creation.

R357-11-2. Authority.

(1) UCA 63M-1-704(2)(b) requires the office to make rules to regulate the Technology Commercialization Innovation Program ("TCIP") grant structure and awards and to recapture awards when a recipient fails to maintain a presence in Utah for at least five years after the award is made, as set forth in these rules.

R357-11-3. Definitions.

(1) This rule adopts the definitions set forth in 63M-1-703.

(2) "Board" means the Board of Business Development set forth in 63M-1-301

(3) "Derivative Technology" means: Incremental advance or new of application of an existing technology.

(4) "Developmental Research Phase" means: A phase in which the technology is not beyond a basic concept as determined by the office.

(5) "New technology means" Intellectual property not previously marketed or generated revenue for any entity.

(6) "Qualified Pre-screening entity "means" A University's Technology Transfer Office or the USTAR Technology Outreach Innovation Program. This term only applies to University team applicants.

(7) Solicitation Cycle Means: A granting cycle from application to grant distribution to be held at least once a year or more depending on availability of funds. All dates for any solicitation may be found on the TCIP website.

(8) "TCIP" means the Technology Commercialization and Innovation Program as defined in Utah Code Section 63M-1-703(6).

R357-11-4. General Grant Requirements.

(1) An applicant can only receive a TCIP award totaling an amount defined in policy per new technology. Policy shall be available on the TCIP website.

(2) An applicant may not submit more than one application in the same solicitation cycle if the applicant has more than one new technology that meets the eligibility requirement for a TCIP grant.

(a) Only one new technology project per applicant will be funded in an solicitation cycle.

(3) An applicant that has generated more than \$500,000 in revenue from the proposed new or derivative technology is not eligible for a TCIP grant.

(4) An applicant that has raised more than \$3,000,000 in total prior funding, including equity and debt based financing, is not eligible for the TCIP grant.

(5) An Applicant may apply for a TCIP grant up to three times for a specific new technology. If, after the third application TCIP does not fund the technology, TCIP will reject subsequent applicants for the same new technology without further review.

R357-11-5. Matching Funds.

(1) Matching funds may be considered in granting an

award. If considered a grant recipient must show proof of the matching funds.

(2) Matching funds may be raised and spent at any time prior to submitting an invoice to the TCIP

(a) Grant recipient must submit bank statements (for Licensees) or financial statements (for Universities) demonstrating that the matching funds were available during the match period.

(b) Matching funds do not have to be in place at the time of the application, but must be in place before TCIP funds are disbursed within the contract period of one year.

R357-11-6. Applicant Specific Requirements.

(1) University Teams: In order to apply for a grant or loan under the TCIP program, a University Team must satisfy the following initial criteria:

(a) The technology must be organized by faculty led university team;

(b) The technology must have completed the developmental research phase; and

(c) The applicant must be pre-screened by a qualified pre-screening entity.

(d) The qualified pre-screening entity must certify that the technology meets the criteria set forth in (a) and (b) of this section, and the certification must be provided before grant is awarded.

(2) Small Businesses: In order to apply for a grant or loan under the TCIP program, a small business must satisfy the following initial criteria:

(a) The applicant must be a "small business" as defined by the Federal Small Business Administration's definition and meet the criteria set forth in UCA Section 63M-1-703(5).

(3) A University-licensee is also eligible if it meets the definitions in (a) above.

R357-11-7. Review of Applications and Awards.

(1) Applicants who successfully meet the eligibility requirements set forth in R357-11-4 and R357-11-5 and R357-11-6 may submit their application for the TCIP grant through the online registration portal.

(2) The Executive Director of GOED or the director's designee will evaluate the applications received in each solicitation cycle. The Executive Director or the designee may use the following criteria, as defined by the Executive Director or the designee, to evaluate applications for TCIP grants:

(a) Quality, diversity, and number of jobs created in Utah,

(b) Quality of Management and Leadership, including experience with commercialization of new technologies as demonstrated by grant applicant's application and proposal;

(c) Strength of the new technology and potential for commercialization;

(d) Size and Growth of the market of the proposed technology

(e) Applicant's ability to market the technology and the credibility of their "go-to-market" strategy.

(f) Availability of matching funds and the source and relevance of those funds as set forth in R357-11-5

(g) Whether the project combines or coordinates related research at two or more institutions of higher education;

(h) Any other criteria deemed necessary or valuable to the selection process.

(3) Additionally, each applicant's application will be compared against and with the strength of all other applicants' applications and proposals within the same solicitation cycle.

(4) The Executive Director may assemble an outside review team to review the criteria set forth above and to make recommendations regarding the application.

(5) The Executive Director or his designee shall propose funding allocations to the Board.

(6) After the Board provides its advice, the Executive Director or the designee shall determine which applications should be prioritized for funding.

(7) Applications will be prioritized and funded based on the criteria set forth in (1)-(3). Award letters will be provided setting forth the terms of the grant offer.

R357-11-8. Requirements for Grant Recipients.

(1) Contract

(a) An applicant who is awarded a TCIP grant must sign a contract with the State of Utah prior to receiving any funds

(2) Sub-Contracts

(a) Grant Recipients are prohibited from subcontracting with another entity to administer the new technology funded by the Grant.

(3) Time in State

(a) Grant recipients will be expected to retain their company, and supported technology, and exploit the technology in the State of Utah for a minimum period of five years from the date of their agreement with the State.

(b) Any applicant who fails to maintain a manufacturing or service location in the state or who fails to exploit the new technology from a location in the state will be subject to recapture of the grant funding, subject to the provisions of Utah Code Section 63M-1-704(2)(d) and R357-11-8.

(4) Authorization to disclose tax information

(a) Licensee grant recipients will be required to sign an authorization to disclose tax records for up to five years from the date of their agreement with the State.

(5) Mentoring Program

(a) Grant awardees may be required to participate in the TCIP Mentoring Program in order to secure funding.

(b) If a grant award is contingent on participation in the TCIP Mentoring Program, an awardee will be required to show active participation in the program prior to receiving any or part of the grant funding as outlined in recipient's contract.

R357-11-9. Funding.

(1) TCIP funding is for developing existing research to the point of commercialization, bridging the "funding gap" between research dollars and manufacturing dollars.

(2) TCIP funding may be used to:

(a) Purchase equipment;

(b) Purchase supplies;

(c) Fund graduate/undergraduate students for time directly applicable to center commercialization activities related to the new technology;

(d) Fund faculty salaries directly applicable to center commercialization and related to the new technology;

(e) Fund product development activities (prototypes, models, simulations);

(f) Fund technology transfer activities (trade shows, brochures, etc.);

(g) Fund market analysis;

(h) Pay for consulting fees directly applicable to center commercialization;

(i) Pay for business manager or marketing manager salaries directly applicable to center commercialization activities; or

(j) Other purposes approved by GOED in writing.

(3) Carryover Funds

(a) The budget described in the contract is designated for the particular fiscal year and is an integral part of the contract. Upon the expiration of the contract, residual funds under the contract can only be accessed by amending the contract as described above.

(4) Invoicing Requirement

(a) Funds are disbursed on a reimbursement basis. To receive funds from the program, an invoice of actual expenses of the funded center should be submitted by the awardee at least quarterly.

(b) Every invoice must include:

(i) Contract Number;

(ii) Name of entity and Principal Investigator.;

(iii) Billing Period; and

(iv) Current and Cumulative Amounts.

R357-11-10. Reporting Requirements.

(1) Reporting and Monitoring

(a) Grant awardees or mentor will be required to submit a report of activities, achievements and expenses, etc. as specified in the awardees contract.

(b) Grant awardees or mentor will be required to comply with the State's request for information pertaining to the economic impact to the State, at least annually for up to five years from date of the agreement.

(c) Grant awardees or mentor will also be required to respond to additional periodic reporting to the TCIP Director, Governor's Office of Economic Development and GOED Board, and the Legislature, at any time during the agreement period and thereafter for two additional years.

(d) Universities and Small Businesses should also expect periodic site visits from TCIP Director or board members. Such visits will be scheduled at mutually convenient times.

R357-11-11. Recapture.

(1) In order to receive grant funding under these provisions, an applicant must commit to maintain a manufacturing location or service location in the State of Utah for at least five years from the date that the grant award letter is issued.

(2) Maintaining a manufacturing and service location means that the applicant will perform at least X percent of the grant activities listed above in the State of Utah, will exploit the technology into a commercial project in Utah and will maintain working operations in the State for at least five years from the date the grant award letter is issued.

(3) If the applicant fails to maintain a manufacturing a service location in Utah for at least five years from the date the grant award letter is issued, the entire grant amount may be subject to recapture.

(4) A repayment by an applicant shall be prorated based on the number of full years the applicant operated in the state from the date of the awarded grant.

(5) Should an applicant fail to comply with the requirements to maintain a manufacturing and service location in Utah for the purpose of exploiting the new technology that is the subject of the grant, the Office will issue a Notice of Agency Action for Recapture.

(6) The Notice of Agency Action shall contain the grounds for recapture, and the prorated amount of the recapture, if any.

KEY: technology, innovation, commercialization, small business

March 23, 2015

63M-1-704(2)

R357. Governor, Economic Development.**R357-12. Fiscal Emergency Contingent Management of Federal Lands.****R357-12-1. Purpose.**

(1) The purpose of this rule is to address the variability of core natural assets that could be affected by a shut down. The following list is the recommendations for prioritizing the opening of federal lands that would be affected. The priority list reflects minimizing the economic impact on Utah and the subsequent gateway communities.

(2) This list is designed in anticipation that a shut-down would likely occur in the Fall and last for ten (10) days or less. The State funding considerations and the priority list below may vary based on the time of year and the corresponding recreational assets that will be opened at that time.

R357-12-2. Authority.

(1) In accordance with Utah Code Subsections 79-4-1103(2) and (3), this rule establishes the priority for opening and maintaining national parks, national monuments, national forests, and national recreation areas in the state during a fiscal emergency.

R357-12-3. Definitions.

(1) This rule adopts the definitions set forth in Utah Code Section 79-4-1101 et seq.

R357-12-4. Priority List.

(1) This rule has no effect until the requirements of Utah Code Section 79-4-1102 have been satisfied.

(a) The following federally managed natural assets constitute locations in Utah, to be known as Tier I priorities. These assets should be funded to remain open year-round because of their significant economic contributions to nearby communities:

- (i) Arches National Park;
- (ii) Bryce National Park;
- (iii) Canyonlands National Park;
- (iv) Capitol Reef National Park;
- (v) Zion National Park;
- (vi) Natural Bridges National Monument;
- (vii) Cedar Breaks National Monument; and
- (viii) Glen Canyon National Recreation Area.

(b) The following constitute natural assets that generate significant seasonal value for local communities and will be known as Tier II priorities. These assets should remain open during the specified seasonal period once all Tier I locations have been funded for opening during a fiscal emergency:

- (i) Dinosaur National Monument, (May 1 through October 31);
- (ii) Golden Spike National Historic Site, (May 1 through August 31);
- (iii) Grand Staircase-Escalante National Monument, (April 1 through October 31);

(A) While the Monument would remain open to dispersed recreation, supplemental funding would be required to open the visitor centers and process guiding permits.

- (iv) Flaming Gorge National Recreation Area, (May 15 through September 15);

(A) Flaming Gorge is the only natural asset being managed by the National Forest Service that would require a separate agreement with the Department of Agriculture.

(B) While the boat ramp and dispersed recreation would remain open to the public in the event of a fiscal emergency, supplemental funding would be required to allow the local concessionaires to remain open.

- (v) San Juan River Special Recreation Management Area, (March 1 through November 30);

(A) Supplemental funding would facilitate permit holders and concessionaires to continue to run the San Juan river.

- (vi) Desolation Canyon Special Recreation Management Area, (May 1 through October 31); and

(A) Supplemental funding would facilitate permit holders and concessionaires to continue to run the Green river.

- (vii) Two Rivers Special Recreation Management Area, (April 1 through October 31);

(A) Supplemental funding would facilitate permit holders and concessionaires to continue to run the Westwater section of the Colorado River.

(c) The following locations, to be known as Tier III assets require no supplemental funding in the event of a fiscal emergency. There is a general understanding with the Federal Public Land Managers is that these assets should remain open to dispersed recreation as defined by the Federal Public Land Managers.

(i) Private concessionaires within the National Forest areas will be subject to the closure rules dictated by the Department of the Interior unless a Memorandum of Understanding (MOU) with the regional Forest Service office can be negotiated.

(A) The negotiation of the MOU will be initiated by the Executive Director of the Governor's Office of Economic Development in consultation with the Director of the Office of Outdoor Recreation.

- (I) Ashley National Forest;
- (II) Dixie National Forest;
- (III) Fishlake National Forest;
- (IV) Manti-La Sal National Forest;
- (V) Uinta-Wasatch-Cache National Forest; and
- (VI) Natural Bridges National Monument.
- (VII) All other BLM Special Recreation Management Areas (SRMA's) not delineated in another section of this document.

(d) The following natural assets are not recommended to be opened and maintained during a fiscal emergency as a result of their minimal contribution to the local economies.

- (i) Hovenweep National Monument;
- (ii) Timpanogos Cave National Monument;
- (iii) Little Sahara Special Recreation Management Area (SRMA); and

(A) The gates would be closed and public access would not be permitted during a fiscal emergency.

- (iv) Knolls Special Recreation Management Area (SRMA).

(A) The gates would be closed and public access would not be permitted during a fiscal emergency.

**KEY: federal lands, federal shutdown, fiscal emergency
March 20, 2015 79-4-1103**

R380. Health, Administration.**R380-40. Local Health Department Minimum Performance Standards.****R380-40-1. Authority.**

This rule is promulgated as required by Section 26A-1-106(1)(c). The minimum performance standards apply to all local health department services, regardless of funding sources.

R380-40-2. Definitions.

- (1) "Department" means the Utah Department of Health.
- (2) "Local health department" means a city/county or district health department.
- (3) "General performance standards" means the minimum duties performed by local health departments for public health administration, personal health, environmental health, laboratory services, and health resources in addition to the powers and duties listed in Section 26A-1-114 and is equivalent to the phrase "minimum performance standards" in Section 26A-1-116(1)(c).
- (4) "Specific level of performance" means the measurable level of each general performance standard.

R380-40-3. Negotiation.

The local health department and the department shall jointly negotiate specific measurable levels of performance, not inconsistent with corresponding general performance standards, and record them in a negotiated standards document. The department and the local health department shall take into account in the negotiation process availability of local technical and financial resources, availability of department technical and financial assistance, and past practices between the department and local health departments in providing the programs under consideration.

R380-40-4. Compliance.

The local health department and the department shall monitor compliance with general performance standards and specific levels of performance.

R380-40-5. Corrective Action.

If the department finds that a local health department is out of compliance with general performance standards and specific levels of performance then the local health department shall submit a plan of corrective action to the department that is satisfactory to the department. The corrective action plan shall include but not be limited to: local health department name; the specific program under consideration; the general performance standard(s) and specific levels of performance in question; date of report; corrective actions; responsible individual; date of plan implementation.

R380-40-6. General Performance Standards For Local Health Department Administration.

- (1) Local health departments shall exercise the powers and duties as outlined in Section 26A-1-114.
- (2) The local board of health shall:
 - (a) establish local health department policies;
 - (b) adopt an annual budget;
 - (c) monitor expenditures;
 - (d) oversee compliance with general and specific performance standards;
 - (e) provide for long range planning;
 - (f) appoint a qualified local health officer, subject to ratification by the governing bodies of the participating jurisdictions;
 - (g) periodically, but at least annually, evaluate the performance of the local health officer; and

(h) report at least annually to county commissioners regarding health issues.

(3) Each local health department shall have an annual financial audit. The local board of health shall appoint an independent auditor or the audit may be conducted as part of the county audit and, in any event, the local board of health shall accept the audit.

- (4) (a) A local health officer who is a physician shall:
 - (i) be a graduate of a regularly chartered and legally constituted school of medicine or osteopathy;
 - (ii) be licensed to practice medicine in the state of Utah;
 - (iii) have successfully completed at least one year's graduate work in public health, public administration or business administration;
 - (iv) be board certified in preventive medicine or in a primary care specialty such as family practice, pediatrics, or internal medicine; and
 - (v) have at least two years of professional full-time experience in public health or preventive medicine in a senior level administrative capacity.
- (b) A local health officer who is not a physician shall:
 - (i) have successfully completed a master's degree in public health, nursing or other health discipline related to public health, or public administration, or business administration from an accredited school and have at least five years of professional full-time public health experience, of which at least three years were in a senior level administrative capacity; or
 - (ii) have successfully completed a bachelor's degree in a field closely related to public health work from an accredited school and have at least 12 years of professional full-time public health experience, of which at least 10 years have been in a senior level administrative capacity.
- (c) If the local health officer is not a physician, the local health department shall contract with or employ a physician that is:
 - (i) residing in Utah and licensed to practice medicine in the state;
 - (ii) competent and experienced in a primary medical care field, such as family practice, pediatrics, OBGYN, or internal medicine;
 - (iii) board certified in preventive medicine or in a primary care specialty such as family practice, pediatrics, or internal medicine;
 - (iv) able to supervise and oversee clinical services delivered within the local health department, including the approval of all protocols and standing orders;
 - (v) able to play a substantial role in reviewing policies and procedures addressing human disease outbreaks of public health importance; and
 - (vi) able to participate in the Department's local health department physician network.
- (d) Local health officers serving as of November 1, 2004, as well as the contracted or employee physician, are deemed to meet the requirements of R380-40-6(4) for the period that the individual so identified serves in those capacities. Upon the hiring of a new local health officer or employing or contracting with a new physician, the requirements of R380-40-6(4)(a), (b), and (c) must be met.
- (e) The Executive Director may grant an exception to the local health officer and physician requirements upon written request from a Local Board of Health documenting the failure of serious and substantial efforts to recruit candidates who meet the requirements or how the intent of the rule can be met by a method not specified in the rule.
- (5) The local health officer shall:
 - (a) promote and protect the health and wellness of the people within the jurisdiction;
 - (b) function as the executive and administrative officer;

(c) report to and receive policy direction from the board of health;

(d) coordinate public health services in the district;

(e) direct programs assigned by statute to the local health department, including administering and enforcing state and local health laws, regulations and standards;

(f) direct the investigation and control of diseases and conditions affecting public health;

(g) be responsible for hiring, terminating, supervising, and evaluating all local health department employees;

(h) oversee proposed budget preparation;

(i) present the budget to the board of health for review and approval;

(j) develop and propose policies for board consideration;

(k) implement policies of the local board of health;

(l) advise the department with regard to policy development as those policies impact upon the mission, purpose, and capacity of the local health department; and

(m) perform other duties as assigned by the board of health.

(6) The local health officer shall ensure that an ongoing planning process is initiated and maintained that includes mission statement; community needs assessments; problem statements; goals, outcomes, and process objectives or implementation activities; evaluation; public involvement; and use of available data sources.

(7) The local health officer shall ensure that fiscal management procedures are developed, implemented and maintained in accordance with federal, state, and local government requirements.

(8) Consistent with federal and state laws and local ordinances and policies, the local health officer shall ensure:

(a) that employees are recruited, hired, terminated, classified, trained, and compensated in accordance with relevant merit principles, federal civil rights requirements, and laws of general applicability, and that their qualifications are commensurate with job responsibilities;

(b) the orientation of all new employees to the local health department and its personnel policies;

(c) the maintenance of a personnel system that includes an accurate, current, and complete personnel record for each local health department employee;

(d) the verification of all current licensure and certification requirements;

(e) continued education and training for all employees;

(f) that each employee receives an annual performance evaluation, based upon a job description and written performance expectations for each employee; and

(g) all training and certification programs for establishing and maintaining quality performance will be conducted as required by the Utah Department of Health and the Utah Department of Commerce.

(9) A local health officer or designee who is a physician or osteopath licensed to practice medicine in Utah shall supervise and be accountable for medical practice conducted by local health department employees. If the local health officer is not a physician or osteopath licensed in Utah, he shall appoint a medical director licensed to practice medicine or osteopathy in Utah to supervise and be accountable for medical practice conducted by local health department employees.

(10) Each local health department shall employ a registered nurse with education, experience, and Utah licensure consistent with the position requirements to supervise, evaluate, and be accountable for nursing practice conducted by local health department nurses in order to provide quality public health nursing service.

(11) Each local health department shall employ a health

educator or other qualified person with education and experience consistent with the position requirements to direct health education activities.

(12) Each local health department shall employ a sanitarian registered in Utah with education and experience consistent with the position requirements to supervise, evaluate, and be accountable for environmental health activities in order to protect and promote public health and protect the environment.

(13) Programs provided by local health departments shall be developed, directed, and organized in response to community needs; delivered and controlled in accordance with approved budget; and evaluated by using a management information system. The management information system, when consistent with program objectives, shall include a method to determine client satisfaction.

(a) Each local health department shall collect and manage data in accordance with the needs of local health department programs, department programs, and other funding sources.

(b) Each local health department shall provide all public health services in compliance with federal, state, and local (including district) laws, regulations, rules, policies and procedures; and accepted standards of public health, medical and nursing practice.

(c) Each local health department shall maintain an ongoing quality assurance program for public health services designed to objectively and systematically monitor and evaluate the quality of public health services and resolve identified problems.

R380-40-7. General Performance Standards For Local Health Department Personal Health Services.

(1) Each local health department shall provide health education, health promotion and risk reduction services to assist residents to:

(a) obtain the necessary knowledge, skills, capacity, and opportunity to improve and maintain individual, family, and community health;

(b) use preventive health services, practices, and facilities appropriately;

(c) understand and participate, where feasible, in decision-making concerning their health care;

(d) understand and encourage compliance with prescribed medical instructions;

(e) participate in community health decision making; and

(f) prevent or delay premature death, disease, injury, or disability through services that encourage the long-term adoption of healthy behavior.

(2) Each local health department shall provide communicable disease control services to include: reporting, surveillance, assessment, epidemiological investigation, and appropriate control measures for vaccine-preventable diseases, sexually transmitted diseases, tuberculosis, AIDS, and other communicable diseases to attempt to prevent, control, or prevent and control epidemics, cases of vaccine-preventable diseases, and the spread of sexually transmitted diseases, AIDS, and tuberculosis.

(3) Each local health department shall provide infant and child health services to help prevent illness, injury, and disability; reduce the preventable complications of illness, injury, and disability; maintain health; and foster healthy growth and development. These services shall include: periodic health assessments; screening for and early identification of health and developmental problems; and provision of appropriate treatment, education, or referral.

(4) Each local health department shall ensure that families of referred cases of infant and childhood death

including Sudden Infant Death Syndrome cases, are offered counseling services or referred to counseling services.

(5) Each local health department shall advocate and promote preventive health services and health instruction for school-aged children.

(6) Each local health department shall ensure that injury control needs are identified and programs or services are available to reduce the occurrence of injury and unintentional death.

(7) Each local health department shall provide chronic disease control services which may include screening, referral, education, promotion, and preventive activities related to the prevention of cardiovascular disease, cancer, diabetes, and other chronic diseases to reduce premature morbidity and mortality associated with these diseases.

(8) Each local health department shall provide family planning services including information to clients who request it and referral in accordance with State law.

(9) Each local health department shall ensure that women and families have access to risk appropriate preconceptional, interconceptional, prenatal, intrapartum, and postpartum health services with the objective of lowering the frequency of maternal and infant death, disease and disability, and promoting the development and maintenance of a healthy, nurturing family unit.

(10) Each local health department shall provide dental health services which may include dental health screening, referral, education, promotion, and preventive activities.

R380-40-8. General Performance Standards For Local Health Department Environmental Health Programs.

(1) Each local health department shall ensure that there is a program for:

(a) food service establishments to include: the maintenance of an inventory, directory, or listing of establishments; inspections including corrective actions; plan reviews; an information management system; and the dissemination of public information;

(b) public swimming pools to include: the maintenance of an inventory, directory, or listing of facilities; inspections including corrective actions; plan reviews; an information management system; and the dissemination of public information;

(c) institutions, public facilities, and indoor and outdoor facilities to include: the maintenance of an inventory, directory, or listing of facilities; inspections including corrective actions; plan reviews; an information management system; and the dissemination of public information;

(d) safe drinking water to include: the maintenance of an inventory, directory, or listing of systems; inspections including corrective actions; an information management system; and the dissemination of public information;

(e) nuisance complaints to include: inspections including corrective actions; an information management system; and the dissemination of public information;

(f) vector control to include: complaint inspections including corrective actions; an information management system; and the dissemination of public information;

(g) air quality and air pollution control to include: conducting limited inspections of visible emissions including corrective actions; an information management system; and the dissemination of public information;

(h) injury control to include: inspections including corrective actions; an information management system; and the dissemination of public information;

(i) indoor clean air to include: inspections of public facilities including corrective actions; an information management system; and the dissemination of public information;

(j) solid waste to include: an inventory, directory, or listing of locations; inspections including corrective actions; an information management system; and the dissemination of public information; and

(k) subsurface waste water systems to include: the maintenance of an inventory, directory, or listing of facilities; inspections including corrective actions; plan reviews; an information management system; and the dissemination of public information.

(2) Each local health department shall develop, implement, and maintain special programs, such as programs to respond to noise, hazardous waste, and asbestos abatement control, to meet the special or unique needs of its community as determined by local or state needs assessment.

R380-40-9. General Performance Standards For Local Health Department Laboratory Services.

All local health departments that have a laboratory are not exempt from existing state and federal laboratory requirements.

R380-40-10. General Performance Standards For Local Health Department Health Resources.

(1) Epidemiology. Each local health department shall provide for the investigation, detection, control, and development of preventive strategies of any communicable, infectious, acute, chronic, or other disease, or environmental or occupational health hazard that is considered dangerous or important or which may affect the public health. Reportable diseases shall be reported.

(2) Vital Statistics. Each local health department designated as a local registrar of vital statistics shall ensure the registration of appropriate certificates for all live births, deaths, and fetal deaths that occur in the registration area, as required by State statute.

**KEY: local health departments, performance standards
February 2, 2005 26A-1-106(1)(c)
Notice of Continuation March 6, 2015**

R382. Health, Children's Health Insurance Program.**R382-10. Eligibility.****R382-10-1. Authority.**

- (1) This rule is authorized by Title 26, Chapter 40.
- (2) The purpose of this rule is to set forth the eligibility requirements for coverage under the Children's Health Insurance Program (CHIP).

R382-10-2. Definitions.

(1) The Department adopts and incorporates by reference the definitions found in Subsections 2110(b) and (c) of the Compilation of Social Security Laws, in effect January 1, 2015.

(2) The Department adopts the definitions in Section R382-1-2. In addition, the Department adopts the following definitions:

(a) "American Indian or Alaska Native" means someone having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.

(b) "Best estimate" means the eligibility agency's determination of a household's income for the upcoming eligibility period, based on past and current circumstances and anticipated future changes.

(c) "Children's Health Insurance Program" (CHIP) means the program for benefits under the Utah Children's Health Insurance Act, Title 26, Chapter 40.

(d) "Co-payment and co-insurance" means a portion of the cost for a medical service for which the enrollee is responsible to pay for services received under CHIP.

(e) "Due process month" means the month that allows time for the enrollee to return all verification, and for the eligibility agency to determine eligibility and notify the enrollee.

(f) "Eligibility agency" means the Department of Workforce Services (DWS) that determines eligibility for CHIP under contract with the Department.

(g) "Employer-sponsored health plan" means a health insurance plan offered by an employer either directly or through Utah's Health Marketplace (Avenue H).

(h) "Ex parte review" means a review process the agency conducts without contacting the recipient for information as defined in 42 CFR 457.343.

(i) "Federally Facilitated Marketplace" (FFM) means the entity individuals can access to enroll in health insurance and apply for assistance from insurance affordability programs such as Advanced Premium Tax Credits, Medicaid and CHIP.

(j) "Modified Adjusted Gross Income" (MAGI) means the income determined using the methodology defined in 42 CFR 435.603(e).

(k) "Presumptive eligibility" means a period of time during which a child may receive CHIP benefits based on preliminary information that the child meets the eligibility criteria.

(l) "Quarterly Premium" means a payment that enrollees must pay every three months to receive coverage under CHIP.

(m) "Review month" means the last month of the eligibility certification period for an enrollee during which the eligibility agency determines an enrollee's eligibility for a new certification period.

(n) "Utah's Premium Partnership for Health Insurance" or "UPPP" means the program described in Rule R414-320.

R382-10-3. Actions on Behalf of a Minor.

(1) A parent, legal guardian or an adult who assumes responsibility for the care or supervision of a child who is under 19 years of age may apply for CHIP enrollment, provide information required by this rule, or otherwise act on behalf of a child in all respects under the statutes and rules

governing the CHIP program.

(2) If the child's parent, responsible adult, or legal guardian wants to designate an authorized representative, he must so indicate in writing to the eligibility agency.

(3) A child who is under 19 years of age and is independent of a parent or legal guardian may assume these responsibilities. The eligibility agency may not require a child who is independent to have an authorized representative if the child can act on his own behalf; however, the eligibility agency may designate an authorized representative if the child needs a representative but cannot make a choice either in writing or orally in the presence of a witness.

(4) Where the statutes or rules governing the CHIP program require a child to take an action, the parent, legal guardian, designated representative or adult who assumes responsibility for the care or supervision of the child is responsible to take the action on behalf of the child. If the parent or adult who assumes responsibility for the care or supervision of the child fails to take an action, the failure is attributable as the child's failure to take the action.

(5) The eligibility agency shall consider notice to the parent, legal guardian, designated representative, or adult who assumes responsibility for the care or supervision of a child to be notice to the child. The eligibility agency shall send notice to a child who assumes responsibility for himself.

R382-10-4. Applicant and Enrollee Rights and Responsibilities.

(1) A parent or an adult who assumes responsibility for the care or supervision of a child may apply or reapply for CHIP benefits on behalf of a child. A child who is independent may apply on his own behalf.

(2) If a person needs assistance to apply, the person may request assistance from a friend, family member, the eligibility agency, or outreach staff.

(3) The applicant must provide verification requested by the eligibility agency to establish the eligibility of the child, including information about the parents.

(4) Anyone may look at the eligibility policy manuals located on-line or at any eligibility agency office, except at outreach or telephone locations.

(5) If the eligibility agency determines that the child received CHIP coverage during a period when the child was not eligible for CHIP, the parent or legal guardian who arranges for medical services on behalf of the child must repay the Department for the cost of services.

(6) The parent or child, or other responsible person acting on behalf of a child must report certain changes to the eligibility agency within ten calendar days of the day the change becomes known. The following changes are reportable:

(a) An enrollee begins to receive coverage or to have access to coverage under a group health plan or other health insurance coverage;

(b) An enrollee leaves the household or dies;

(c) An enrollee or the household moves out of state;

(d) Change of address of an enrollee or the household; and

(e) An enrollee enters a public institution or an institution for mental diseases.

(7) The parent or child, or other responsible person acting on behalf of a child must report the following changes to the eligibility agency. These changes must be reported at a review involving enrollee participation, or within ten calendar days of the notice date that informs the enrollee of a completed ex parte review:

(a) A new income source;

(b) A change in gross income of \$25 or more;

(c) Tax filing status;

- (d) Pregnancy or termination of a pregnancy;
 - (e) Number of dependents claimed as tax dependents;
 - (f) Earnings of a child;
 - (g) Marital status; and
 - (h) Student status of a child.
- (8) An applicant and enrollee may review the information that the eligibility agency uses to determine eligibility.
- (9) An applicant and enrollee have the right to be notified about actions that the agency takes to determine their eligibility or continued eligibility, the reason the action was taken, and the right to request an agency conference or agency action as defined in Section R414-301-6 and Section R414-301-7.
- (10) An enrollee in CHIP must pay quarterly premiums, co-payments, or co-insurance amounts to providers for medical services that the enrollee receives under CHIP.

R382-10-5. Verification and Information Exchange.

- (1) The provisions of Section R414-308-4 apply to applicants and enrollees of CHIP.
- (2) The Department and the eligibility agency shall safeguard applicant and enrollee information in accordance with Section R414-301-4.
- (3) The Department or the eligibility agency may release information concerning applicants and enrollees and their households to other state and federal agencies to determine eligibility for other public assistance programs.
- (4) The Department adopts and incorporates by reference 42 CFR 457.348, 457.350, and 457.380, October 1, 2012 ed.
- (5) The Department shall enter into an agreement with the Centers for Medicare and Medicaid Services (CMS) to allow the FFM to screen applications and reviews submitted through the FFM for CHIP eligibility.
- (a) The agreement must provide for the exchange of file data and eligibility status information between the Department and the FFM as required to determine eligibility and enrollment in insurance affordability programs, and eligibility for advance premium tax credits and reduced cost sharing.
- (b) The agreement applies to agencies under contract with the Department to provide CHIP eligibility determination services.
- (6) The Department and the eligibility agency shall release information to the Title IV-D agency and Social Security Administration to determine benefits.

R382-10-6. Citizenship and Alienage.

- (1) To be eligible to enroll in CHIP, a child must be a citizen or national of the United States (U.S.) or a qualified alien.
- (2) The provisions of Section R414-302-3 regarding citizenship and alien status requirements apply to applicants and enrollees of CHIP.

R382-10-7. Utah Residence.

- (1) The Department adopts and incorporates by reference, 42 CFR 457.320(d), October 1, 2012 ed. A child must be a Utah resident to be eligible to enroll in the program.
- (2) An American Indian or Alaska Native child in a boarding school is a resident of the state where his parents reside. A child in a school for the deaf and blind is a resident of the state where his parents reside.
- (3) A child is a resident of the state if he is temporarily absent from Utah due to employment, schooling, vacation, medical treatment, or military service.
- (4) The child need not reside in a home with a permanent location or fixed address.

R382-10-8. Residents of Institutions.

- (1) Residents of institutions described in Section 2110(b)(2)(A) of the Compilation of Social Security Laws are not eligible for the program.
- (2) A child under the age of 18 is not a resident of an institution if he is living temporarily in the institution while arrangements are being made for other placement.
- (3) A child who resides in a temporary shelter for a limited period of time is not a resident of an institution.

R382-10-9. Social Security Numbers.

- (1) The eligibility agency may request an applicant to provide the correct Social Security Number (SSN) or proof of application for a SSN for each household member at the time of application for the program. The eligibility agency shall use the SSN in accordance with the requirements of 42 CFR 457.340(b), October 1, 2012 ed., which is incorporated by reference.
- (2) The eligibility agency shall require that each applicant claiming to be a U.S. citizen or national provide their SSN for the purpose of verifying citizenship through the Social Security Administration in accordance with Section 2105(c)(9) of the Compilation of the Social Security Laws.
- (3) The eligibility agency may request the SSN of a lawful permanent resident alien applicant, but may not deny eligibility for failure to provide an SSN.
- (4) The Department may assign a unique CHIP identification number to an applicant or beneficiary who meets one of the exceptions to the requirement to provide an SSN.

R382-10-10. Creditable Health Coverage.

- (1) To be eligible for enrollment in the program, a child must meet the requirements of Sections 2110(b) of the Compilation of Social Security Laws.
- (2) A child who is covered under a group health plan or other health insurance that provides coverage in Utah, including coverage under a parent's or legal guardian's employer, as defined in 29 CFR 2590.701-4, July 1, 2013 ed., is not eligible for CHIP assistance.
- (3) A child who has access to health insurance coverage, where the cost to enroll the child in the least expensive plan offered by the employer is less than 5% of the countable MAGI-based income for the individual, is not eligible for CHIP. The child is considered to have access to coverage even when the employer only offers coverage during an open enrollment period, and the child has had at least one chance to enroll.
- (4) An eligible child who has access to an employer-sponsored health plan, where the cost to enroll the child in the least expensive plan offered by the employer equals or exceeds 5% of the countable MAGI-based income for the individual may choose to enroll in either CHIP or UPP.
- (a) To enroll in UPP, the child must meet UPP eligibility requirements.
- (b) If the UPP eligible child enrolls in the employer-sponsored health plan or COBRA coverage, but the plan does not include dental benefits, the child may receive dental-only benefits through CHIP.
- (c) If the employer-sponsored health plan or COBRA coverage includes dental, the applicant may choose to enroll the child in the dental plan and receive an additional reimbursement from UPP, or receive dental-only benefits through CHIP.
- (d) A child enrolled in CHIP who gains access to or enrolls in an employer-sponsored health plan may switch to the UPP program if the child meets UPP eligibility requirements.
- (5) The cost of coverage is based upon the countable

MAGI-based income for the individual's household and will include the following:

- (a) the premium;
- (b) a deductible, if the employer-sponsored plan has a deductible; and
- (c) the cost to enroll the employee, if the employee must be enrolled to enroll the child.

(6) Subject to the provisions published in 42 CFR 457.805(b), October 1, 2013 ed., which the Department adopts and incorporates by reference, the eligibility agency shall deny eligibility and impose a 90-day waiting period for enrollment under CHIP if the applicant or a custodial parent voluntarily terminates health insurance that provides coverage in Utah within the 90 days before the application date. In addition, the agency may not apply a 90-day waiting period in the following situations:

- (a) a non-custodial parent voluntarily terminates coverage;
- (b) the child is voluntarily terminated from insurance that does not provide coverage in Utah;
- (c) the child is voluntarily terminated from a limited health insurance plan;
- (d) a child is terminated from a custodial parent's insurance because ORS reverses the forced enrollment requirement due to the insurance being unaffordable;
- (e) voluntary termination of COBRA;
- (f) voluntary termination of Utah Comprehensive Health Insurance Pool coverage; or
- (g) voluntary termination of UPP reimbursed, employer-sponsored coverage.

(7) If the 90-day ineligibility period for CHIP ends in the month of application, or by the end of the month that follows, the eligibility agency shall determine the applicant's eligibility.

(a) If eligible, enrollment in CHIP begins the day after the 90-day ineligibility period ends.

(b) If the 90-day ineligibility period does not end by the end of the month that follows the application month, the eligibility agency shall deny CHIP eligibility.

(8) The Department shall comply with the provisions of enrollment after the waiting period in accordance with 42 CFR 457.340, October 1, 2013 ed., which the Department adopts and incorporates by reference.

(9) A child with creditable health coverage operated or financed by Indian Health Services is not excluded from enrolling in CHIP.

R382-10-11. Household Composition and Income Provisions.

(1) The Department adopts and incorporates by reference, 42 CFR 457.315, October 1, 2012 ed., regarding the household composition and income methodology to determine eligibility for CHIP.

(2) Any individual described in Subsection R382-10-11(1) who is temporarily absent solely by reason of employment, school, training, military service, or medical treatment, or who will return home to live within 30 days from the date of application, is part of the household.

(3) The household size includes the number of unborn children that a pregnant household member expects to deliver.

(4) The eligibility agency elects the option in 42 CFR 435.603(f)(3)(iv)(B).

(5) The eligibility agency may not count as income any payments from sources that federal law specifically prohibits from being counted as income to determine eligibility for federally-funded programs.

(6) The eligibility agency may not count as income any payments that an individual receives pursuant to the Individual Indian Money Account Litigation Settlement under

the Claims Resettlement Act of 2010, Pub. L. No. 111 291, 124 Stat. 3064.

(7) The eligibility agency shall count as income cash support received by an individual when:

- (a) it is received from the tax filer who claims a tax exemption for the individual;
- (b) the individual is not a spouse or child of the tax filer; and

(c) the cash support exceeds a nominal amount set by the Department.

(8) The eligibility agency determines eligibility by deducting an amount equal to 5% of the federal poverty guideline, as defined in 42 CFR 435.603 (d)(4).

R382-10-12. Age Requirement.

(1) A child must be under 19 years of age sometime during the application month to enroll in the program. An otherwise eligible child who turns 19 years of age during the application month may receive CHIP for the application month and the four-day grace period.

(2) The month in which a child turns 19 years of age is the last month of eligibility for CHIP enrollment.

R382-10-13. Budgeting.

(1) The eligibility agency determines countable household income according to MAGI-based methodology as required by 42 CFR 457.315.

(2) The eligibility agency shall determine a child's eligibility and cost sharing requirements prospectively for the upcoming eligibility period at the time of application and at each renewal for continuing eligibility.

(a) The eligibility agency determines prospective eligibility by using the best estimate of the household's average monthly income expected to be received or made available to the household during the upcoming eligibility period.

(b) The eligibility agency shall include in its estimate, reasonably predictable income changes such as seasonal income or contract income, to determine the average monthly income expected to be received during the certification period.

(c) The eligibility agency prorates income that is received less often than monthly over the eligibility period to determine an average monthly income.

(3) Methods of determining the best estimate are income averaging, income anticipating, and income annualizing. The eligibility agency may use a combination of methods to obtain the most accurate best estimate. The best estimate may be a monthly amount that is expected to be received each month of the eligibility period, or an annual amount that is prorated over the eligibility period. Different methods may be used for different types of income received in the same household.

(4) The eligibility agency determines farm and self-employment income by using the individual's recent tax return forms or other verifications the individual can provide. If tax returns are not available, or are not reflective of the individual's current farm or self-employment income, the eligibility agency may request income information from a recent time period during which the individual had farm or self-employment income. The eligibility agency deducts the same expenses from gross income that the Internal Revenue Service allows as self-employment expenses to determine net self-employment income, if those expenses are expected to occur in the future.

R382-10-14. Assets.

An asset test is not required for CHIP eligibility.

R382-10-15. Application and Eligibility Reviews.

(1) The Department adopts and incorporates by reference 42 CFR 457.330, 457.340, 457.343, and 457.348, October 1, 2013 ed.

(2) The provisions of Section R414-308-3 apply to applicants for CHIP, except for Subsection R414-308-3(10) and the three months of retroactive coverage.

(3) Individuals can apply without having an interview. The eligibility agency may interview applicants and enrollee's, the parents or spouse, and any adult who assumes responsibility for the care or supervision of the child, when necessary to resolve discrepancies or to gather information that cannot be obtained otherwise.

(4) The eligibility agency shall complete a periodic review of an enrollee's eligibility for CHIP medical assistance in accordance with the requirements of 42 CFR 457.343.

(5) If an enrollee fails to respond to a request for information to complete the review during the review month, the agency shall end the enrollee's eligibility effective at the end of the review month and send proper notice to the enrollee.

(a) If the enrollee responds to the review or reapplies within three calendar months of the review closure date, the eligibility agency shall treat the response as a new application without requiring the enrollee to reapply. The application processing period then applies for this new request for coverage.

(b) If the enrollee is determined eligible based on this reapplication, the new certification period begins the first day of the month in which the enrollee contacts the agency to complete the review if verification is provided within the application processing period. The four day grace period may apply. If the enrollee fails to return verification within the application processing period, or if the enrollee is determined ineligible, the eligibility agency shall send a denial notice to the enrollee.

(c) The eligibility agency may not continue eligibility while it makes a new eligibility determination.

(6) Except as defined in R382-10-15(5), the enrollee must reapply for CHIP if the enrollee's case is closed for one or more calendar months.

(7) If the eligibility agency sends proper notice of an adverse decision during the review month, the agency shall change eligibility for the month that follows.

(8) If the eligibility agency does not send proper notice of an adverse change for the month that follows, the agency shall extend eligibility to that month. The eligibility agency shall send proper notice of the effective date of an adverse decision. The enrollee does not owe a premium for the due process month.

(9) If the enrollee responds to the review in the review month and the verification due date is in the month that follows, the eligibility agency shall extend eligibility to the month that follows. The enrollee must provide all verification by the verification due date.

(a) If the enrollee provides all requested verification by the verification due date, the eligibility agency shall determine eligibility and send proper notice of the decision.

(b) If the enrollee does not provide all requested verification by the verification due date, the eligibility agency shall end eligibility effective at the end of the month in which the eligibility agency sends proper notice of the closure.

(c) If the enrollee returns all verification after the verification due date and before the effective closure date, the eligibility agency shall treat the date that it receives all verification as a new application date. The eligibility agency shall determine eligibility and send a notice to the enrollee.

(d) The eligibility agency may not continue eligibility while it determines eligibility. The new certification date for the application is the day after the effective closure date if the

enrollee is found eligible.

(10) The eligibility agency shall provide ten-day notice of case closure if the enrollee is determined to be ineligible or if the enrollee fails to provide verification by the verification due date.

(11) If eligibility for CHIP enrollment ends, the eligibility agency shall review the case for eligibility under any other medical assistance program without requiring a new application. The eligibility agency may request additional verification from the household if there is insufficient information to make a determination.

(12) An applicant must report at application and review whether any of the children in the household for whom enrollment is being requested have access to or are covered by a group health plan, other health insurance coverage, or a state employee's health benefits plan.

(13) The eligibility agency shall deny an application or review if the enrollee fails to respond to questions about health insurance coverage for children whom the household seeks to enroll or renew in the program.

R382-10-16. Eligibility Decisions.

(1) The Department adopts and incorporates by reference 42 CFR 457.350, October 1, 2013, ed., regarding eligibility screening.

(2) The eligibility agency shall determine eligibility for CHIP within 30 days of the date of application. If the eligibility agency cannot make a decision in 30 days because the applicant fails to take a required action and requests additional time to complete the application process, or if circumstances beyond the eligibility agency's control delay the eligibility decision, the eligibility agency shall document the reason for the delay in the case record.

(3) The eligibility agency may not use the time standard as a waiting period before determining eligibility, or as a reason for denying eligibility when the agency does not determine eligibility within that time.

(4) The eligibility agency shall complete a determination of eligibility or ineligibility for each application unless:

(a) the applicant voluntarily withdraws the application and the eligibility agency sends a notice to the applicant to confirm the withdrawal;

(b) the applicant died; or

(c) the applicant cannot be located or does not respond to requests for information within the 30-day application period.

(5) The eligibility agency shall redetermine eligibility every 12 months.

(6) At application and review, the eligibility agency shall determine if any child applying for CHIP enrollment is eligible for coverage under Medicaid.

(a) A child who is eligible for Medicaid coverage is not eligible for CHIP.

(b) An eligible child who must meet a spenddown to receive Medicaid and chooses not to meet the spenddown may enroll in CHIP.

(7) If an enrollee asks for a new income determination during the CHIP certification period and the eligibility agency finds the child is eligible for Medicaid, the agency shall end CHIP coverage and enroll the child in Medicaid.

R382-10-17. Effective Date of Enrollment and Renewal.

(1) Subject to the limitations in Section R414-306-6, Section R382-10-10, and the provisions in Subsection R414-308-3(7), the effective date of CHIP enrollment is the first day of the application month.

(2) If the eligibility agency receives an application during the first four days of a month, the agency shall allow a

grace enrollment period that begins no earlier than four days before the date that the agency receives a completed and signed application.

(a) If the eligibility agency allows a grace enrollment period that extends into the month before the application month, the days of the grace enrollment period do not count as a month in the 12-month enrollment period.

(b) During the grace enrollment period, the individual must receive medical services, meet eligibility criteria, and have an emergency situation that prevents the individual from applying. The Department may not pay for any services that the individual receives before the effective enrollment date.

(3) For a family who has a child enrolled in CHIP and who adds a newborn or adopted child, the effective date of enrollment is the date of birth or placement for adoption if the family requests the coverage within 30 days of the birth or adoption. If the family makes the request more than 30 days after the birth or adoption, enrollment in CHIP will be effective beginning the first day of the month in which the date of report occurs, subject to the limitations in Section R414-306-6, Section R382-10-10, and the provisions of Subsection R382-10-17(2).

(4) The effective date of enrollment for a new certification period after the review month is the first day of the month after the review month, if the review process is completed by the end of the review month. If a due process month is approved, the effective date of enrollment for a renewal is the first day of the month after the due process month if the review process is completed by the end of the due process month. The enrollee must complete the review process and continue to be eligible to be reenrolled in CHIP at review.

R382-10-18. Enrollment Period.

(1) Subject to the provisions in Subsection R382-10-18(2), a child determined eligible for CHIP receives 12 months of coverage that begins with the effective month of enrollment.

(2) CHIP coverage may end before the end of the 12-month certification period if the child:

- (a) turns 19 years of age before the end of the 12-month enrollment period;
- (b) moves out of the state;
- (c) becomes eligible for Medicaid;
- (d) leaves the household;
- (e) fails to respond to a request to verify access to employer-sponsored health coverage;
- (f) begins to be covered under a group health plan or other health insurance coverage;
- (g) enters a public institution or an institution for mental diseases; or
- (h) does not pay the quarterly premium.

(3) The agency shall take the following actions on changes reported after an ex parte review is completed:

(a) The agency shall re-determine eligibility when it receives a change report before the ten-day notice deadline in the review month;

(b) The agency shall process the reported change according to Subsections R382-10-18(5), (6) and (7) if the agency receives a change report after the ten-day notice deadline in the review month.

(4) If the agency cannot complete an ex parte review, the agency shall complete a regular review by requesting updated information from the client. The agency will act on all reported changes to re-determine eligibility up to the point of approving a new certification period. Subsections R382-10-18(5), (6) and (7) apply to changes reported after the regular review has been completed.

(5) Certain changes affect an enrollee's eligibility during

the 12-month certification period.

(a) If an enrollee gains access to health insurance under an employer-sponsored plan or COBRA coverage, the enrollee may switch to UPP. The enrollee must report the health insurance within ten calendar days of enrolling, or within ten calendar days of when coverage begins, whichever is later. The employer-sponsored plan must meet UPP criteria.

(b) If income decreases, the enrollee may report the income and request a redetermination. If the change makes the enrollee eligible for Medicaid, the eligibility agency shall end CHIP eligibility and enroll the child in Medicaid.

(c) If income increases during the certification period, eligibility remains unchanged through the end of the certification period.

(6) The agency shall re-determine eligibility if a family reports a decrease in income and requests a redetermination during the certification period. A decrease in the premium is effective as follows:

(a) The premium change is effective the month of report if income decreased that month and the family provides timely verification of income;

(b) The premium change is effective the month following the report month if the decrease in income is for the following month and the family provides timely verification of income;

(c) The premium change is effective the month in which verification of the decrease in income is provided, if the family does not provide timely verification of income.

(7) Failure to make a timely report of a reportable change may result in an overpayment of benefits and case closure.

R382-10-19. Quarterly Premiums.

(1) Each family with children enrolled in the CHIP program must pay a quarterly premium based on the countable income of the family during the first month of the quarter.

(a) The eligibility agency may not charge a premium to a child who is American Indian or Alaska Native.

(b) A family with countable income up to 150% of the federal poverty level must pay a quarterly premium of \$30.

(c) A family with countable income greater than 150% and up to 200% of the federal poverty level must pay a quarterly premium of \$75.

(d) The agency shall charge the family the lowest premium amount when the family has two or more children, and those children qualify for different quarterly premium amounts.

(2) The eligibility agency shall end CHIP coverage and assess a \$15 late fee to a family who does not pay its quarterly premium by the premium due date.

(3) The agency may reinstate coverage if the family pays the premium and the late fee by the last day of the month immediately following the termination.

(4) A child is ineligible for CHIP for three months if CHIP is terminated for failure to pay the quarterly premium. The child must reapply at the end of the three months. If eligible, the agency shall approve eligibility without payment of the past due premiums or late fee.

(5) The eligibility agency may not charge the household a premium during a due process month associated with the periodic eligibility review.

(6) The eligibility agency shall assess premiums that are payable each quarter for each month of eligibility.

R382-10-20. Termination and Notice.

(1) The eligibility agency shall notify an applicant or enrollee in writing of the eligibility decision made on the

application or periodic eligibility review.

(2) The eligibility agency shall notify an enrollee in writing ten calendar days before the effective date of an action that adversely affects the enrollee's eligibility.

(3) Notices under Section R382-10-20 shall provide the following information:

(a) the action to be taken;

(b) the reason for the action;

(c) the regulations or policy that support the action when the action is a denial, closure or an adverse change to eligibility;

(d) the applicant's or enrollee's right to a hearing;

(e) how an applicant or enrollee may request a hearing;

and

(f) the applicant's or enrollee's right to represent himself, use legal counsel, a friend, relative, or other spokesperson.

(4) The eligibility agency need not give ten-day notice of termination if:

(a) the child is deceased;

(b) the child moves out-of-state and is not expected to return;

(c) the child enters a public institution or an institution for mental diseases; or

(d) the child's whereabouts are unknown and the post office has returned mail to indicate that there is no forwarding address.

R382-10-21. Case Closure or Withdrawal.

(1) The eligibility agency shall end a child's enrollment upon enrollee request or upon discovery that the child is no longer eligible. An applicant may withdraw an application for CHIP benefits any time before the eligibility agency makes a decision on the application.

(2) The eligibility agency shall comply with the requirements of 42 CFR 457.350(i), regarding transfer of the electronic file for the purpose of determining eligibility for other insurance affordability programs.

KEY: children's health benefits

April 1, 2015

Notice of Continuation May 9, 2013

26-1-5

26-40

R384. Health, Disease Control and Prevention, Health Promotion.**R384-300. Parkinson's Disease Reporting Rule.****R384-300-1. Purpose Statement.**

(1) The Parkinson's Disease Reporting Rule is adopted under authority of sections 26-1-30 and 26-5-3.

(2) Parkinson's Disease (PD) is a common neurodegenerative disease that affects one in 100 persons over the age of 65 years. PD is a progressive, ultimately fatal condition, which may be more common in Utah than in other states. The growth rate of the over-65 segment of the population in Utah is more than 30%. The purpose of the Utah Parkinson's Disease Registry (Registry) is to develop a central database of accurate historical and current information for research and public health purposes. The Parkinson's Disease Reporting Rule will provide for screening and collection of patient data that may be useful in detecting the incidence and possible risk factors concerning PD and related movement disorders. The information gained will help increase understanding of this disease and aid in planning for early diagnosis, developing health education for patients and providers, and providing correct medical or surgical therapy health requirements.

(3) Parkinson's Disease records are managed by the Parkinson's Disease Registry at the University of Utah on behalf of the Utah Department of Health. This Parkinson's Disease Reporting Rule is adopted to specify the reporting requirements for cases of Parkinson's Disease to the Registry. The Utah Department of Health retains ownership and all rights to the records in the Registry.

R384-300-2. Definitions.

As used in this rule:

(1) "Parkinson's Disease" means a chronic, progressive disorder marked by resting tremors, muscular rigidity, and slow, imprecise movement, chiefly affecting middle-aged and elderly people. The disease is often asymmetric. It is associated with degeneration of the basal ganglia of the brain and a deficiency of the neurotransmitter dopamine. Treatment with L-DOPA or dopamine agonists is virtually always helpful, although the effects may be as short as 6 months.

(2) "Follow-up data" includes date last seen or date of death, status of disease, date of first recurrence, type of recurrence, distant site(s) of first recurrence, and the name of the physician who is following the case.

(3) "Health care provider" includes any person who renders health care or professional services such as a physician, physician assistant, nurse practitioner, registered nurse, licensed practical nurse, dentist, optometrist, podiatric physician, osteopathic physician, osteopathic physician and surgeon, or others rendering patient care.

(4) "Registrar" means a person who

(a) is employed as a registrar by the Registry and has attended their training program;

(b) has in-depth experience with Parkinson's Disease and medical terminology relating to movement disorders; knowledge of the spectrum of providers and care settings treating PD; and knowledge of medical record discharge analysis, coding, and abstracting.

R384-300-3. Reportable Cases.

Each case of Parkinson's Disease or related movement disorder that is diagnosed or treated in Utah shall be reported to the Utah Parkinson's Disease Registry through a website or by mail.

R384-300-4. Case Report Contents.

Each report of Parkinson's Disease or related movement disorder shall include information on report forms provided

by the Registry. These reports shall be made in the format prescribed by the Registry and shall include the name and address of the patient, date of birth, gender, medical history, date and method of diagnosis, laboratory data, methods and drugs of treatment, follow-up data, physicians' names and addresses, identification of reporting source, and any additional information the Utah Department of Health demonstrates is reasonable to implement the Parkinson's Disease Registry.

R384-300-5. Agencies or Individuals Required to Report Cases.

(1) All physicians, hospitals, clinics, pathology laboratories licensed to provide services in the state, nursing homes, and other facilities and health care providers involved in the diagnosis or treatment of Parkinson's Disease shall report to the Registry.

(2) Voluntary self-reports by patients on a confidential website developed and maintained by the University of Utah may be also included in the registry.

(3) Procedures for reporting:

(a) Hospital employed registrars shall report hospital cases.

(b) Individual physicians, e.g., neurologists, and clinics shall report cases seen in their practices.

(c) Pending implementation of electronic reporting by pathology laboratories, pathology laboratories shall allow the Registry to identify reportable cases and extract the required information during routine visits to pathology laboratories.

(d) If the Registry has not received complete information on a reportable case from routine reporting sources (hospitals, clinician's offices, pathology laboratories, nursing homes and other facilities), the Registry may contact health care providers and require them to complete a report form.

R384-300-6. Time Requirements.

(1) New Cases:

(a) Providers, hospitals and clinics shall submit reports to the Registry within a year of the date of diagnosis.

(b) Other facilities and health care providers shall submit reportable data to the Registry upon request.

(2) Follow-up Data:

(a) Hospitals, physicians and clinics shall submit follow-up data to the Registry upon request.

R384-300-7. Reporting Format.

Reports shall be submitted in the standard format designated by the Registry. Report forms can be obtained by contacting the Registry.

R384-300-8. Data Quality Assurance.

Records maintained by hospitals, pathology laboratories, cancer clinics, and physicians are subject to review by Registry personnel acting on behalf of the Utah Department of Health to assure the completeness and accuracy of reported data.

R384-300-9. Confidentiality of Reports.

All reports required by this rule are confidential under the provisions of Title 26, Chapter 3 and are not open to inspection except as allowed by Title 26, Chapter 3. The Registry shall maintain all reports according to the provisions of Title 26, Chapter 3.

R384-300-10. Penalties.

Enforcement provisions and penalties for the violation or for the enforcement of public health rules, including this Parkinson's Disease Reporting Rule, are prescribed under

Section 26-23-6 and are punishable.

**KEY: Parkinson's disease, reporting requirements and
procedures, registry
March 12, 2015**

**26-1-30
26-5-3**

R396. Health, Disease Control and Prevention, Immunization.**R396-100. Immunization Rule for Students.****R396-100-1. Purpose and Authority.**

(1) This rule implements the immunization requirements of Title 53A, Chapter 11, Part 3. It establishes minimum immunization requirements for attendance at a public, private, or parochial kindergarten, elementary, or secondary school through grade 12, nursery school, licensed day care center, child care facility, family home care, or Head Start program in this state. It establishes:

(a) required doses and frequency of vaccine administration;

(b) reporting of statistical data; and

(c) time periods for conditional enrollment.

(2) This rule is required by Section 53A-11-303 and authorized by Section 53A-11-306.

R396-100-2. Definitions.

As used in this rule:

"Department" means the Utah Department of Health.

"Early Childhood Program" means a nursery or preschool, licensed day care center, child care facility, family care home, or Head Start program.

"Exemption" means a relief from the statutory immunization requirements by reason of qualifying under Sections 53A-11-302 and 302.5.

"Parent" means a biological or adoptive parent who has legal custody of a child; a legal guardian, or the student, if of legal age.

"School" means a public, private, or parochial kindergarten, elementary, or secondary school through grade 12.

"School entry" means a student, at any grade, entering a Utah school or an early childhood program for the first time.

"Student" means an individual enrolled or attempting to enroll in a school or early childhood program.

R396-100-3. Required Immunizations.

(1) A student born before July 1, 1993 must meet the minimum immunization requirements of the ACIP prior to school entry for the following antigens: Diphtheria, Tetanus, Pertussis, Polio, Measles, Mumps, and Rubella.

(2) A student born after July 1, 1993 must meet the minimum immunization requirements of the ACIP prior to school entry for the following antigens: Diphtheria, Tetanus, Pertussis, Polio, Measles, Mumps, Rubella, and Hepatitis B.

(3) A student born after July 1, 1993, must also meet the minimum immunization requirements of the ACIP prior to entry into the seventh grade for the following antigens: Tetanus, Diphtheria, Pertussis, Varicella, and Meningococcal.

(4) A student born after July 1, 1996 must meet the minimum immunization requirements of the ACIP prior to school entry for the following antigens: Diphtheria, Tetanus, Pertussis, Polio, Measles, Mumps, Rubella, Hepatitis B, Hepatitis A, and Varicella.

(5) To attend a Utah early childhood program, a student must meet the minimum immunization requirements of the ACIP for the following antigens: Diphtheria, Tetanus, Pertussis, Polio, Measles, Mumps, Rubella, Haemophilus Influenza Type b, Hepatitis A, Hepatitis B, Pneumococcal, and Varicella vaccines prior to school entry.

(6) The vaccinations must be administered according to the recommendations of the United States Public Health Service's Advisory Committee on Immunization Practices (ACIP) as listed below which are incorporated by reference into this rule:

(a) General Recommendations on Immunization: MMWR, December 1, 2006/Vol. 55/No. RR-15;

(b) Immunization of Adolescents: MMWR, November 22, 1996/Vol. 45/No. RR-13;

(c) Combination Vaccines for Childhood Immunization: MMWR, May 14, 1999/Vol. 48/No. RR-5;

(d) Use of Diphtheria Toxoid-Tetanus Toxoid-Acellular Pertussis Vaccine as a Five-Dose Series: Supplemental Recommendations of the Advisory Committee on Immunization Practices: MMWR November 17, 2000/Vol. 49/No. RR-13;

(e) Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis (Tdap) Vaccine from the Advisory Committee on Immunization Practices, 2010: MMWR, January 14, 2011/Vol. 60/No. 1;

(f) A Comprehensive Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States: MMWR, December 23, 2005/Vol. 54/No. RR-6;

(g) Haemophilus b Conjugate Vaccines for Prevention of Haemophilus influenza Type b Disease Among Infants and Children Two Months of Age and Older: MMWR, January 11, 1991/Vol. 40/No. RR-1;

(h) Recommendations for Use of Haemophilus b Conjugate Vaccines and a Combined Diphtheria, Tetanus, and Pertussis, and Haemophilus b Vaccine: MMWR, September 17, 1993/Vol. 42/No. RR-13;

(i) Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP) for the Control and Elimination of Mumps: MMWR, June 9, 2006/Vol. 55/No. RR-22;

(j) Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP) Regarding Routine Poliovirus Vaccination: MMWR, August 7, 2009/Vol. 58/No. 30;

(k) Prevention of Varicella: MMWR, June 22, 2007/Vol. 56/No. RR-4;

(l) Prevention of Hepatitis A Through Active or Passive Immunization: MMWR, May 29, 2006/Vol. 55/No. RR-7;

(m) Licensure of a 13-Valent Pneumococcal Conjugate Vaccine (PCV13) and Recommendations for Use Among Children-Advisory Committee on Immunization Practices, (ACIP), 2010: MMWR March 12, 2010/Vol. 59/No. 09; and

(n) Prevention and Control of Meningococcal Disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP): March 22, 2013/62(RR02);1-22.

R396-100-4. Official Utah School Immunization Record (USIR).

(1) Schools and early childhood programs shall use the official Utah School Immunization Record (USIR) form as the record of each student's immunizations. The Department shall provide copies of the USIR to schools, early childhood programs, physicians, and local health departments upon each of their requests.

(2) Each school or early childhood program shall accept any immunization record provided by a licensed physician, registered nurse, or public health official as certification of immunization. It shall transfer this information to the USIR with the following information:

(a) name of the student;

(b) student's date of birth;

(c) vaccine administered; and

(d) the month, day, and year each dose of vaccine was administered.

(3) Each school and early childhood program shall maintain a file of the USIR for each student in all grades and an exemption form for each student claiming an exemption.

(a) The school and early childhood programs shall maintain up-to-date records of the immunization status for all

students in all grades such that it can quickly exclude all non-immunized students if an outbreak occurs.

(b) If a student withdraws, transfers, is promoted or otherwise leaves school, the school or early childhood program shall either:

(i) return the USIR and any exemption form to the parent of a student; or
(ii) transfer the USIR and any exemption form with the student's official school record to the new school or early childhood program.

(4) A representative of the Department or the local health department may examine, audit, and verify immunization records maintained by any school or early childhood program.

(5) Schools and early childhood programs may meet the record keeping requirements of this section by keeping its official school immunization records in the Utah Statewide Immunization Information System (USIIS).

R396-100-5. Exemptions.

A parent claiming an exemption to immunization for medical, religious or personal reasons, as allowed by Section 53A-11-302, shall provide to the student's school or early childhood program the required completed forms. The school or early childhood program shall attach the forms to the student's USIR.

R396-100-6. Reporting Requirements.

(1) Each school and early childhood program shall report the following to the Department in the form or format prescribed by the Department:

(a) by November 30 of each year, a statistical report of the immunization status of students enrolled in a licensed day care center, Head Start program, and kindergartens;

(b) by November 30 of each year, a statistical report of the two-dose measles, mumps, and rubella immunization status of all kindergarten through twelfth grade students;

(c) by November 30 of each year, a statistical report of tetanus, diphtheria, pertussis, hepatitis B, varicella, and the two-dose measles, mumps, and rubella immunization status of all seventh grade students; and

(d) by June 15 of each year, a statistical follow-up report of those students not appropriately immunized from the November 30 report in all public schools, kindergarten through twelfth grade.

(2) The information that the Department requires in the reports shall be in accordance with the Centers for Disease Control and Prevention guidelines.

R396-100-7. Conditional Enrollment and Exclusion.

A school or early childhood program may conditionally enroll a student who is not appropriately immunized as required in this rule. To be conditionally enrolled, a student must have received at least one dose of each required vaccine and be on schedule for subsequent immunizations. If subsequent immunizations are one calendar month past due, the school or early childhood program must immediately exclude the student from the school or early childhood program.

(1) A school or early childhood program with conditionally enrolled students shall routinely review every 30 days the immunization status of all conditionally enrolled students until each student has completed the subsequent doses and provided written documentation to the school or early childhood program.

(2) Once the student has met the requirements of this rule, the school or early childhood program shall take the student off conditional status.

R396-100-8. Exclusions of Students Who Are Under Exemption and Conditionally Enrolled Status.

(1) A local or state health department representative may exclude a student who has claimed an exemption to all vaccines or to one vaccine or who is conditionally enrolled from school attendance if there is good cause to believe that the student has a vaccine preventable disease or:

(a) has been exposed to a vaccine-preventable disease; or

(b) will be exposed to a vaccine-preventable disease as a result of school attendance.

(2) An excluded student may not attend school until the local health officer is satisfied that a student is no longer at risk of contracting or transmitting a vaccine-preventable disease.

R396-100-9. Penalties.

Enforcement provisions and penalties for the violation or for the enforcement of public health rules, including this Immunization Rule for Students, are prescribed under Section 26-23-6.

KEY: immunizations, rules and procedures

December 5, 2014

53A-11-303

Notice of Continuation June 28, 2013

53A-11-306

R414. Health, Health Care Financing, Coverage and Reimbursement Policy.

R414-1. Utah Medicaid Program.

R414-1-1. Introduction and Authority.

(1) This rule generally characterizes the scope of the Medicaid Program in Utah, and defines all of the provisions necessary to administer the program.

(2) The rule is authorized by Title XIX of the Social Security Act, and Sections 26-1-5, 26-18-2.1, 26-18-2.3, UCA.

R414-1-2. Definitions.

The following definitions are used throughout the rules of the Division:

- (1) "Act" means the federal Social Security Act.
- (2) "Applicant" means any person who requests assistance under the medical programs available through the Division.
- (3) "Categorically needy" means aged, blind or disabled individuals or families and children:
 - (a) who are otherwise eligible for Medicaid; and
 - (i) who meet the financial eligibility requirements for AFDC as in effect in the Utah State Plan on July 16, 1996; or
 - (ii) who meet the financial eligibility requirements for SSI or an optional State supplement, or are considered under section 1619(b) of the federal Social Security Act to be SSI recipients; or
 - (iii) who is a pregnant woman whose household income does not exceed 133% of the federal poverty guideline; or
 - (iv) is under age six and whose household income does not exceed 133% of the federal poverty guideline; or
 - (v) who is a child under age one born to a woman who was receiving Medicaid on the date of the child's birth and the child remains with the mother; or
 - (vi) who is least age six but not yet age 18, or is at least age six but not yet age 19 and was born after September 30, 1983, and whose household income does not exceed 100% of the federal poverty guideline; or
 - (vii) who is aged or disabled and whose household income does not exceed 100% of the federal poverty guideline; or
 - (viii) who is a child for whom an adoption assistance agreement with the state is in effect.
- (b) whose categorical eligibility is protected by statute.
- (4) "Code of Federal Regulations" (CFR) means the publication by the Office of the Federal Register, specifically Title 42, used to govern the administration of the Medicaid Program.
- (5) "Client" means a person the Division or its duly constituted agent has determined to be eligible for assistance under the Medicaid program.
- (6) "CMS" means The Centers for Medicare and Medicaid Services, a Federal agency within the U.S. Department of Health and Human Services. Programs for which CMS is responsible include Medicare, Medicaid, and the State Children's Health Insurance Program.
- (7) "Department" means the Department of Health.
- (8) "Director" means the Director of the Division.
- (9) "Division" means the Division of Health Care Financing within the Department.
- (10) "Emergency medical condition" means a medical condition showing acute symptoms of sufficient severity that the absence of immediate medical attention could reasonably be expected to result in:
 - (a) placing the patient's health in serious jeopardy;
 - (b) serious impairment to bodily functions;
 - (c) serious dysfunction of any bodily organ or part; or
 - (d) death.
- (11) "Emergency service" means immediate medical

attention and service performed to treat an emergency medical condition. Immediate medical attention is treatment rendered within 24 hours of the onset of symptoms or within 24 hours of diagnosis.

(12) "Emergency Services Only Program" means a health program designed to cover a specific range of emergency services.

(13) "Executive Director" means the executive director of the Department.

(14) "InterQual" means the McKesson Criteria for Inpatient Reviews, a comprehensive, clinically based, patient focused medical review criteria and system developed by McKesson Corporation.

(15) "Medicaid agency" means the Department of Health.

(16) "Medical assistance program" or "Medicaid program" means the state program for medical assistance for persons who are eligible under the state plan adopted pursuant to Title XIX of the federal Social Security Act; as implemented by Title 26, Chapter 18.

(17) "Medical or hospital assistance" means services furnished or payments made to or on behalf of recipients under medical programs available through the Division.

(18) "Medically necessary service" means that:

(a) it is reasonably calculated to prevent, diagnose, or cure conditions in the recipient that endanger life, cause suffering or pain, cause physical deformity or malfunction, or threaten to cause a handicap; and

(b) there is no other equally effective course of treatment available or suitable for the recipient requesting the service that is more conservative or substantially less costly.

(19) "Medically needy" means aged, blind, or disabled individuals or families and children who are otherwise eligible for Medicaid, who are not categorically needy, and whose income and resources are within limits set under the Medicaid State Plan.

(20) "Medical standards," as applied in this rule, means that an individual may receive reasonable and necessary medical services up until the time a physician makes an official determination of death.

(21) "Prior authorization" means the required approval for provision of a service that the provider must obtain from the Department before providing the service. Details for obtaining prior authorization are found in Section I of the Utah Medicaid Provider Manual.

(22) "Provider" means any person, individual or corporation, institution or organization that provides medical, behavioral or dental care services under the Medicaid program and who has entered into a written contract with the Medicaid program.

(23) "Recipient" means a person who has received medical or hospital assistance under the Medicaid program, or has had a premium paid to a managed care entity.

(24) "Undocumented alien" means an alien who is not recognized by Immigration and Naturalization Services as being lawfully present in the United States.

(25) "Utilization review" means the Department provides for review and evaluation of the utilization of inpatient Medicaid services provided in acute care general hospitals to patients entitled to benefits under the Medicaid plan.

(26) "Utilization Control" means the Department has implemented a statewide program of surveillance and utilization control that safeguards against unnecessary or inappropriate use of Medicaid services, safeguards against excess payments, and assesses the quality of services available under the plan. The program meets the requirements of 42 CFR, Part 456.

R414-1-3. Single State Agency.

The Utah Department of Health is the Single State Agency designated to administer or supervise the administration of the Medicaid program under Title XIX of the federal Social Security Act.

R414-1-4. Medical Assistance Unit.

Within the Utah Department of Health, the Division of Health Care Financing has been designated as the medical assistance unit.

R414-1-5. Incorporations by Reference.

The Department incorporates the January 1, 2015 versions of the following by reference:

- (1) Utah Medicaid State Plan, including any approved amendments, under Title XIX of the Social Security Act Medical Assistance Program;
- (2) Medical Supplies Utah Medicaid Provider Manual, Section 2, Medical Supplies, as applied in Rule R414-70;
- (3) Hospital Services Utah Medicaid Provider Manual with its attachments;
- (4) Home Health Agencies Utah Medicaid Provider Manual, and the manual's attachment for the Private Duty Nursing Acuity Grid;
- (5) Speech-Language Pathology and Audiology Services Utah Medicaid Provider Manual;
- (6) Hospice Care Utah Medicaid Provider Manual;
- (7) Long Term Care Services in Nursing Facilities Utah Medicaid Provider Manual with its attachments;
- (8) Personal Care Utah Medicaid Provider Manual with its attachments;
- (9) Utah Home and Community-Based Waiver Services for Individuals 65 or Older Utah Medicaid Provider Manual;
- (10) Utah Home and Community-Based Waiver Services for Individuals with Acquired Brain Injury Age 18 and Older Utah Medicaid Provider Manual;
- (11) Utah Home and Community-Based Waiver for Individuals with Intellectual Disabilities or Other Related Conditions Utah Medicaid Provider Manual;
- (12) Utah Home and Community-Based Waiver Services for Individuals with Physical Disabilities Utah Medicaid Provider Manual;
- (13) Utah Home and Community-Based Waiver Services New Choices Waiver Utah Medicaid Provider Manual;
- (14) Utah Home and Community-Based Waiver Services for Technology Dependent, Medically Fragile Individuals Utah Medicaid Provider Manual;
- (15) Utah Home and Community-Based Waiver Services Autism Waiver Utah Medicaid Provider Manual;
- (16) Office of Inspector General Administrative Hearings Procedures Manual;
- (17) Pharmacy Services Utah Medicaid Provider Manual with its attachments;
- (18) Coverage and Reimbursement Code Look-up Tool found at <http://health.utah.gov/medicaid/stplan/lookup/CoverageLookup.php>;
- (19) CHEC Services Utah Medicaid Provider Manual with its attachments;
- (20) Chiropractic Medicine Utah Medicaid Provider Manual;
- (21) Dental, Oral Maxillofacial, and Orthodontia Services Utah Medicaid Provider Manual;
- (22) General Attachments for the Utah Medicaid Provider Manual;
- (23) Indian Health Utah Medicaid Provider Manual;
- (24) Laboratory Services Utah Medicaid Provider Manual with its attachments;

- (25) Medical Transportation Utah Medicaid Provider Manual;
- (26) Non-Traditional Medicaid Health Plan Utah Medicaid Provider Manual with its attachments;
- (27) Licensed Nurse Practitioner Utah Medicaid Provider Manual;
- (28) Physical Therapy and Occupational Therapy Services Utah Medicaid Provider Manual;
- (29) Physician Services and Anesthesiology Utah Medicaid Provider Manual with its attachments;
- (30) Podiatric Services Utah Medicaid Provider Manual;
- (31) Primary Care Network Utah Medicaid Provider Manual with its attachments;
- (32) Psychology Services Utah Medicaid Provider Manual;
- (33) Rehabilitative Mental Health and Substance Use Disorder Services Utah Medicaid Provider Manual;
- (34) Rural Health Clinics and Federally Qualified Health Centers Services Utah Medicaid Provider Manual with its attachments;
- (35) School-Based Skills Development Services Utah Medicaid Provider Manual;
- (36) Section I: General Information of the Utah Medicaid Provider Manual;
- (37) Services for Pregnant Women Utah Medicaid Provider Manual;
- (38) Targeted Case Management for Individuals with Serious Mental Illness Utah Medicaid Provider Manual;
- (39) Targeted Case Management for Early Childhood (Ages 0-4) Utah Medicaid Provider Manual;
- (40) Vision Care Services Utah Medicaid Provider Manual; and
- (41) Women's Services Utah Medicaid Provider Manual.

R414-1-6. Services Available.

- (1) Medical or hospital services available under the Medical Assistance Program are generally limited by federal guidelines as set forth under Title XIX of the federal Social Security Act and Title 42 of the Code of Federal Regulations (CFR).
- (2) The following services provided in the State Plan are available to both the categorically needy and medically needy:
 - (a) inpatient hospital services, with the exception of those services provided in an institution for mental diseases;
 - (b) outpatient hospital services and rural health clinic services;
 - (c) other laboratory and x-ray services;
 - (d) skilled nursing facility services, other than services in an institution for mental diseases, for individuals 21 years of age or older;
 - (e) early and periodic screening and diagnoses of individuals under 21 years of age, and treatment of conditions found, are provided in accordance with federal requirements;
 - (f) family planning services and supplies for individuals of child-bearing age;
 - (g) physician's services, whether furnished in the office, the patient's home, a hospital, a skilled nursing facility, or elsewhere;
 - (h) podiatrist's services;
 - (i) optometrist's services;
 - (j) psychologist's services;
 - (k) interpreter's services;
 - (l) home health services;
 - (i) intermittent or part-time nursing services provided by a home health agency;
 - (ii) home health aide services by a home health agency; and

- (iii) medical supplies, equipment, and appliances suitable for use in the home;
- (m) private duty nursing services for children under age 21;
- (n) clinic services;
- (o) dental services;
- (p) physical therapy and related services;
- (q) services for individuals with speech, hearing, and language disorders furnished by or under the supervision of a speech pathologist or audiologist;
- (r) prescribed drugs, dentures, and prosthetic devices and eyeglasses prescribed by a physician skilled in diseases of the eye or by an optometrist;
- (s) other diagnostic, screening, preventive, and rehabilitative services other than those provided elsewhere in the State Plan;
- (t) services for individuals age 65 or older in institutions for mental diseases:
 - (i) inpatient hospital services for individuals age 65 or older in institutions for mental diseases;
 - (ii) skilled nursing services for individuals age 65 or older in institutions for mental diseases; and
 - (iii) intermediate care facility services for individuals age 65 or older in institutions for mental diseases;
- (u) intermediate care facility services, other than services in an institution for mental diseases. These services are for individuals determined, in accordance with section 1902(a)(31)(A) of the Social Security Act, to be in need of this care, including those services furnished in a public institution for the mentally retarded or for individuals with related conditions;
- (v) inpatient psychiatric facility services for individuals under 22 years of age;
- (w) nurse-midwife services;
- (x) family or pediatric nurse practitioner services;
- (y) hospice care in accordance with section 1905(o) of the Social Security Act;
- (z) case management services in accordance with section 1905(a)(19) or section 1915(g) of the Social Security Act;
- (aa) extended services to pregnant women, pregnancy-related services, postpartum services for 60 days, and additional services for any other medical conditions that may complicate pregnancy;
- (bb) ambulatory prenatal care for pregnant women furnished during a presumptive eligibility period by a qualified provider in accordance with section 1920 of the Social Security Act; and
- (cc) other medical care and other types of remedial care recognized under state law, specified by the Secretary of the United States Department of Health and Human Services, pursuant to 42 CFR 440.60 and 440.170, including:
 - (i) medical or remedial services provided by licensed practitioners, other than physician's services, within the scope of practice as defined by state law;
 - (ii) transportation services;
 - (iii) skilled nursing facility services for patients under 21 years of age;
 - (iv) emergency hospital services; and
 - (v) personal care services in the recipient's home, prescribed in a plan of treatment and provided by a qualified person, under the supervision of a registered nurse.
- (dd) other medical care, medical supplies, and medical equipment not otherwise a Medicaid service if the Division determines that it meets both of the following criteria:
 - (i) it is medically necessary and more appropriate than any Medicaid covered service; and
 - (ii) it is more cost effective than any Medicaid covered service.

R414-1-7. Aliens.

(1) Certain qualified aliens described in Title IV of Pub. L. No. 104 193, 110 Stat. 2105, may be eligible for the Medicaid program. All other aliens are prohibited from receiving non-emergency services as described in Section 1903(v) of the Social Security Act.

(2) An alien who is prohibited from receiving non-emergency services will have "Emergency Services Only Program" printed on his Medical Identification Card, as noted in Rule R414-3A.

R414-1-8. Statewide Basis.

The medical assistance program is state-administered and operates on a statewide basis in accordance with 42 CFR 431.50.

R414-1-9. Medical Care Advisory Committee.

There is a Medical Care Advisory Committee that advises the Medicaid agency director on health and medical care services. The committee is established in accordance with 42 CFR 431.12.

R414-1-10. Discrimination Prohibited.

In accordance with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.), Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 70b), and the regulations at 45 CFR Parts 80 and 84, the Medicaid agency assures that no individual shall be subjected to discrimination under the plan on the grounds of race, color, gender, national origin, or handicap.

R414-1-11. Administrative Hearings.

The Department has a system of administrative hearings for medical providers and dissatisfied applicants, clients, and recipients that meets all the requirements of 42 CFR, Part 431, Subpart E.

R414-1-12. Utilization Review.

(1) The Department conducts hospital utilization review as outlined in the Superior System Waiver in effect at the time service was rendered.

(2) The Department shall determine medical necessity and appropriateness of inpatient admissions during utilization review by use of InterQual Criteria, published by McKesson Corporation.

(3) The standards in the InterQual Criteria shall not apply to services in which a determination has been made to utilize criteria customized by the Department or that are:

- (a) excluded as a Medicaid benefit by rule or contract;
- (b) provided in an intensive physical rehabilitation center as described in Rule R414-2B; or
- (c) organ transplant services as described in Rule R414-10A.

In these exceptions, or where InterQual is silent, the Department shall approve or deny services based upon appropriate administrative rules or its own criteria as incorporated in the Medicaid provider manuals.

R414-1-13. Provider and Client Agreements.

(1) To meet the requirements of 42 CFR 431.107, the Department contracts with each provider who furnishes services under the Utah Medicaid Program.

(2) By signing a provider agreement with the Department, the provider agrees to follow the terms incorporated into the provider agreements, including policies and procedures, provider manuals, Medicaid Information Bulletins, and provider letters.

(3) By signing an application for Medicaid coverage, the client agrees that the Department's obligation to reimburse

for services is governed by contract between the Department and the provider.

R414-1-14. Utilization Control.

(1) In order to control utilization, and in accordance with 42 CFR 440, Subpart B, services, equipment, or supplies not specifically identified by the Department as covered services under the Medicaid program are not a covered benefit. In addition, the Department will also use prior authorization for utilization control. All necessary and appropriate medical record documentation for prior approvals must be submitted with the request. If the provider has not obtained prior authorization for a service as outlined in the Medicaid provider manual, the Department shall deny coverage of the service.

(2) The Department may request records that support provider claims for payment under programs funded through the Department. These requests must be in writing and identify the records to be reviewed. Responses to requests must be returned within 30 days of the date of the request. Responses must include the complete record of all services for which reimbursement is claimed and all supporting services. If there is no response within the 30 day period, the Department will close the record and will evaluate the payment based on the records available.

(3)(a) If the Department pays for a service which is later determined not to be a benefit of the Utah Medicaid program or does not comply with state or federal policies and regulations, the provider shall refund the payment upon written request from the Department.

(b) If services cannot be properly verified or when a provider refuses to provide or grant access to records, the provider shall refund to the Department all funds for services rendered. Otherwise, the Department may deduct an equal amount from future reimbursements.

(c) Unless appealed, the refund must be made to Medicaid within 30 days of written notification. An appeal of this determination must be filed within 30 days of written notification as specified in Rule R410-14.

(d) A provider shall reimburse the Department for all overpayments regardless of the reason for the overpayment.

(e) Provider appeals of action for recovery or withholding of money initiated by the Office of Inspector General of Medicaid Services (OIG) shall be governed by the OIG Administrative Hearings Procedures Manual incorporated by reference in Section R414-1-5.

R414-1-15. Medicaid Fraud.

The Department has established and will maintain methods, criteria, and procedures that meet all requirements of 42 CFR 455.13 through 455.21 for prevention and control of program fraud and abuse.

R414-1-16. Confidentiality.

State statute, Title 63G, Chapter 2, and Section 26-1-17.5, impose legal sanctions and provide safeguards that restrict the use or disclosure of information concerning applicants, clients, and recipients to purposes directly connected with the administration of the plan.

All other requirements of 42 CFR Part 431, Subpart F are met.

R414-1-17. Eligibility Determinations.

Determinations of eligibility for Medicaid under the plan are made by the Division of Health Care Financing, the Utah Department of Workforce Services, and the Utah Department of Human Services. There is a written agreement among the Utah Department of Health, the Utah Department of Workforce Services, and the Utah Department of Human

Services. The agreement defines the relationships and respective responsibilities of the agencies.

R414-1-18. Professional Standards Review Organization.

All other provisions of the State Plan shall be administered by the Medicaid agency or its agents according to written contract, except for those functions for which final authority has been granted to a Professional Standards Review Organization under Title XI of the Act.

R414-1-19. Timeliness in Eligibility Determinations.

The Medicaid agency shall adhere to all timeliness requirements of 42 CFR 435.911, for processing applications, determining eligibility, and approving Medicaid requests. If these requirements are not completed within the defined time limits, clients may notify the Division of Health Care Financing at 288 North, 1460 West, Salt Lake City, UT 84114-2906.

R414-1-20. Residency.

Medicaid is furnished to eligible individuals who are residents of the State under 42 CFR 435.403.

R414-1-21. Out-of-state Services.

Medicaid services shall be made available to eligible residents of the state who are temporarily in another state. Reimbursement for out-of-state services shall be provided in accordance with 42 CFR 431.52.

R414-1-22. Retroactive Coverage.

Individuals are entitled to Medicaid services under the plan during the 90 days preceding the month of application if they were, or would have been, eligible at that time.

R414-1-23. Freedom of Choice of Provider.

Unless an exception under 42 CFR 431.55 applies, any individual eligible under the plan may obtain Medicaid services from any institution, pharmacy, person, or organization that is qualified to perform the services and has entered into a Medicaid provider contract, including an organization that provides these services or arranges for their availability on a prepayment basis.

R414-1-24. Availability of Program Manuals and Policy Issuances.

In accordance with 42 CFR 431.18, the state office, local offices, and all district offices of the Department maintain program manuals and other policy issuances that affect recipients, providers, and the public. These offices also maintain the Medicaid agency's rules governing eligibility, need, amount of assistance, recipient rights and responsibilities, and services. These manuals, policy issuances, and rules are available for examination and, upon request, are available to individuals for review, study, or reproduction.

R414-1-25. Billing Codes.

In submitting claims to the Department, every provider shall use billing codes compliant with Health Insurance Portability and Accountability Act of 1996 (HIPAA) requirements as found in 45 CFR Part 162.

R414-1-26. General Rule Format.

The following format is used generally throughout the rules of the Division. Section headings as indicated and the following general definitions are for guidance only. The section headings are not part of the rule content itself. In certain instances, this format may not be appropriate and will not be implemented due to the nature of the subject matter of

a specific rule.

(1) Introduction and Authority. A concise statement as to what Medicaid service is covered by the rule, and a listing of specific federal statutes and regulations and state statutes that authorize or require the rule.

(2) Definitions. Definitions that have special meaning to the particular rule.

(3) Client Eligibility. Categories of Medicaid clients eligible for the service covered by the rule: Categorically Needy or Medically Needy or both. Conditions precedent to the client's obtaining coverage such as age limitations or otherwise.

(4) Program Access Requirements. Conditions precedent external to the client's obtaining service, such as type of certification needed from attending physician, whether available only in an inpatient setting or otherwise.

(5) Service Coverage. Detail of specific services available under the rule, including limitations, such as number of procedures in a given period of time or otherwise.

(6) Prior Authorization. As necessary, a description of the procedures for obtaining prior authorization for services available under the particular rule. However, prior authorization must not be used as a substitute for regulatory practice that should be in rule.

(7) Other Sections. As necessary under the particular rule, additional sections may be indicated. Other sections include regulatory language that does not fit into sections (1) through (5).

R414-1-27. Determination of Death.

(1) In accordance with the provisions of Section 26-34-2, the fiduciary responsibility for medically necessary care on behalf of the client ceases upon the determination of death.

(2) Reimbursement for the determination of death by acceptable medical standards must be in accordance with Medicaid coverage and billing policies that are in place on the date the physician renders services.

R414-1-28. Cost Sharing.

(1) An enrollee is responsible to pay the:

- (a) hospital a \$220 coinsurance per year;
- (b) hospital a \$6 copayment for each non-emergency use of hospital emergency services;

- (c) provider a \$3 copayment for outpatient office visits for physician and physician-related mental health services except that no copayment is due for preventive services, immunizations, health education, family planning, and related pharmacy costs; and

- (d) pharmacy a \$3 copayment per prescription up to a maximum of \$15 per month;

(2) The out-of-pocket maximum payment for copayments for physician and outpatient services is \$100 per year.

(3) The provider shall collect the copayment amount from the Medicaid client. Medicaid shall deduct that amount from the reimbursement it pays to the provider.

(4) Medicaid clients in the following categories are exempt from copayment and coinsurance requirements;

- (a) children;
- (b) pregnant women;
- (c) institutionalized individuals;
- (d) American Indians; and
- (e) individuals whose total gross income, before exclusions and deductions, is below the temporary assistance to needy families (TANF) standard payment allowance. These individuals must indicate their income status to their eligibility caseworker on a monthly basis to maintain their exemption from the copayment requirements.

R414-1-29. Provider-Preventable Conditions.

(1) In accordance with 42 CFR 447.26, October 1, 2011 ed., which is incorporated by reference, Medicaid will not reimburse providers or contractors for provider-preventable conditions as noted therein. Please see Utah Medicaid State Plan Attachments 4.19-A and 4.19-B for detail.

(2) Medicaid providers who treat Medicaid eligible patients must report all provider-preventable conditions whether or not reimbursement for the services is sought. Medicaid providers shall meet this requirement by complying with existing state reporting requirements (rules and legislation) of these events that include:

- (a) Rule R380-200;
- (b) Rule R380-210;
- (c) Rule R386-705;
- (d) Rule R428-10; and
- (e) Section 26-6-31.

(3) Utilizing the reporting mechanism from one of the rules noted above shall not impact confidentiality and privacy protections for reporting entities as noted in Title 26, Chapter 25, Confidential Information Release.

KEY: Medicaid

March 2, 2015

Notice of Continuation March 2, 2012

26-1-5

26-18-3

26-34-2

R501. Human Services, Administration, Administrative Services, Licensing.**R501-19. Residential Treatment Programs.****R501-19-1. Authority.**

Pursuant to Section 62A-2-101 et seq., the Office of Licensing shall license residential treatment programs according to the following rules.

R501-19-2. Purpose.

Residential treatment programs offer room and board and provides for or arranges for the provision of specialized treatment, rehabilitation or habilitation services for persons with emotional, psychological, developmental, or behavioral dysfunctions, impairments, or chemical dependencies. In residential treatment programs, consumers are assisted in acquiring the social and behavioral skills necessary for living independently in the community in accordance with Subsection 62A-2-101(15).

R501-19-3. Definition.

Residential treatment program means a 24-hour group living environment for four or more individuals unrelated to the owner or provider in accordance with Subsection 62A-2-101(15).

R501-19-4. Administration.

A. In addition to the following rules, all Residential Treatment Programs shall comply with R501-2, Core Standards.

B. A current list of enrollment of all registered consumers shall be on-site at all times.

R501-19-5. Staffing.

A. The program shall have an employed manager who is responsible for the day to day resident supervision and operation of the facility. The responsibilities of the manager shall be clearly defined. Whenever the manager is absent there shall be a substitute available.

B. The program shall have a staff person trained, by a certified instructor, in standard first aid and CPR on duty with the consumers at all times.

C. Programs which utilize students and volunteers, shall provide screening, training, and evaluation of volunteers. Volunteers shall be informed verbally and in writing of program objectives and scope of service.

D. Professional staff shall include the following individuals who have received training in the specific area listed below:

1. Mental Health

- a. a licensed physician or consulting licensed physician,

- b. a licensed psychologist, or consulting licensed psychologist,

- c. a licensed mental health therapist,

- d. a licensed advanced practice registered nurse-psychiatric mental health nurse specialist, or a consulting advanced practice registered nurse-psychiatric mental health nurse specialist, and

- e. if unlicensed staff are used, they shall be supervised by a licensed clinical professional.

2. Substance Abuse

- a. a licensed physician, or a consulting licensed physician,

- b. a licensed psychologist or consulting licensed psychologist,

- c. a licensed mental health therapist or consulting licensed, mental health therapist, and

- d. a licensed substance abuse counselor or unlicensed staff who work with substance abusers shall be supervised by a licensed clinical professional.

3. Children and Youth

- a. a licensed physician, or consulting licensed physician,

- b. a licensed psychologist, or consulting licensed psychologist, and

- c. a licensed mental health therapist or consulting licensed mental health therapist, to provide a minimum of one hour of service to the program per week per consumer enrolled.

- d. A licensed medical practitioner, by written agreement, shall be available to provide, as needed, a minimum of one hour of service per week for every two consumers enrolled.

- e. Other staff trained to work with emotionally and behaviorally disturbed, or conduct disordered children and youth shall be under the supervision of a licensed clinical professional.

- f. A minimum of two staff on duty and, a staff ratio of no less than one staff to every four consumers shall exist at all times, except nighttime sleeping hours when staff may be reduced.

- g. A mixed gender population shall have at least one male and one female staff on duty at all times.

4. Services for People With Disabilities shall have a staff person responsible for program supervision and operation of the facility. Staff person shall be adequately trained to provide the services and treatment stated in the consumer plan.

R501-19-6. Direct Service.

Treatment plans shall be reviewed and signed by the clinical supervisor. Treatment plans shall be reviewed and signed by the clinical supervisor, or other qualified individuals for Division of Services for People With Disabilities services. Plans shall be reviewed and signed as noted in the treatment plan.

R501-19-7. Physical Facilities.

A. The program shall provide written documentation of compliance with the following items as applicable:

1. local zoning ordinances,
2. local business license requirements,
3. local building codes,
4. local fire safety regulations,
5. local health codes, and
6. local approval from the appropriate government agency for new program services or increased consumer capacity.

- B. Building and Grounds

1. The program shall ensure that the appearance and cleanliness of the building and grounds are maintained.

2. The program shall take reasonable measures to ensure a safe physical environment for consumers and staff.

R501-19-8. Physical Environment.

A. Live-in staff shall have separate living space with a private bathroom.

B. The program shall have space to serve as an administrative office for records, secretarial work and bookkeeping.

C. Indoor space for free and informal activities of consumers shall be available.

D. Provision shall be made for consumer privacy.

E. Space shall be provided for private and group counseling sessions.

- F. Sleeping Space

1. No more than four persons, or two for Division of Services for People With Disabilities programs, shall be housed in a single bedroom.

2. A minimum of sixty square feet per consumer shall be

provided in a multiple occupant bedroom. Storage space will not be counted.

3. A minimum eighty square feet per individual shall be provided in a single occupant bedroom. Storage space will not be counted.

4. Sleeping areas shall have a source of natural light, and shall be ventilated by mechanical means or equipped with a screened window that opens.

5. Each bed, none of which shall be portable, shall be solidly constructed, and be provided with clean linens after each consumer stay and at least weekly.

6. Sleeping quarters serving male and female residents shall be structurally separated.

7. Consumers shall be allowed to decorate and personalize bedrooms with respect for other residents and property.

G. Bathrooms

1. The program shall have separate bathrooms for males and females. These shall be maintained in good operating order and in a clean and safe condition.

2. Bathrooms shall accommodate consumers with physical disabilities as required.

3. Each bathroom shall be properly equipped with toilet paper, towels, soap, and other items required for personal hygiene.

4. Bathrooms shall be ventilated by mechanical means or equipped with a screened window that opens.

5. Bathrooms shall meet a minimum ratio of one toilet, one lavatory, and one tub or shower for each six residents.

6. There shall be toilets and baths or showers which allow for individual privacy.

7. There shall be mirrors secured to the walls at convenient heights.

8. Bathrooms shall be located as to allow access without disturbing other residents during sleeping hours.

H. Furniture and equipment shall be of sufficient quantity, variety, and quality to meet program and consumer needs.

I. All furniture and equipment shall be maintained in a clean and safe condition.

J. Programs which permit individuals to do their own laundry shall provide equipment and supplies for washing, drying, and ironing.

K. Programs which provide for common laundry of linens and clothing, shall provide containers for soiled laundry separate from storage for clean linens and clothing.

L. Laundry appliances shall be maintained in a clean and safe operating condition.

R501-19-9. Food Service.

A. One staff shall be responsible for food service. If this person is not a professionally qualified dietitian, regularly scheduled consultation with a professionally qualified dietitian shall be obtained. Meals served shall be from dietitian approved menus.

B. The staff responsible for food service shall maintain a current list of consumers with special nutritional needs and record in the consumers service record information relating to special nutritional needs and provide for nutrition counseling where indicated.

C. The program shall establish and post kitchen rules and privileges according to consumer needs.

D. Consumers present in the facility for four or more consecutive hours shall be provided nutritious food.

E. Meals may be prepared at the facility or catered.

F. Kitchens shall have clean, safe, and operational equipment for the preparation, storage, serving, and clean up of all meals.

G. Adequate dining space shall be provided for

consumers. The dining space shall be maintained in a clean and safe condition.

H. When meals are prepared by consumers there shall be a written policy to include the following:

1. rules of kitchen privileges,
2. menu planning and procedures,
3. nutritional and sanitation requirements, and
4. schedule of responsibilities.

R501-19-10. Medication.

A. The program shall have locked storage for medications.

B. The program shall have locked storage for hazardous chemicals and materials, according to the direction of the local fire authorities.

C. Prescriptive medication shall be provided as prescribed by a qualified physician, according to the Medical Practices Act.

D. The program shall have designated qualified staff, who shall be responsible to:

1. administer medication,
2. supervise self-medication,
3. record medication, including time and dosage, according to prescription, and
4. record effects of medication.

R501-19-11. Specialized Services for Substance Abuse.

A. The program shall not admit anyone who is currently experiencing convulsions, in shock, delirium tremens, in a coma, or unconscious.

B. At a minimum, the program shall document that direct service staff complete standard first aid and CPR training within six months of being hired. Training shall be updated as required by the certifying agency.

C. Before admission, consumers shall be tested for Tuberculosis. Both consumers and staff shall be tested annually or as directed by the local health authority.

R501-19-12. Specialized Services for Programs Serving Children and Youth.

A. Provisions shall be available for adolescents to continue their education with a curriculum approved by the State Office of Education.

B. Programs which provide their own school shall be recognized by an educational accreditation organization, i.e., State Board of Education or the National School Accreditation Board.

C. Individual, group, couple, and family counseling sessions or other appropriate treatment, including skills development, shall be conducted at least weekly, or more often if defined by the treatment plan. The consumer's record shall document the time and date of the service provided and include the signature of the counselor.

D. An accurate record shall be kept of all funds deposited and withdrawn with the residential facility for use by a consumer. Consumer purchases of over \$20.00 per item, shall be substantiated by receipts signed by the consumer and appropriate staff.

R501-19-13. Specialized Services for Division of Services for People With Disabilities.

A. Rules governing the daily operation and activities of the facility shall be available to all consumers and visitors, and shall apply to family members, consumers, and staff that come into the facility.

B. The program shall have policy specifying the amount of time family or friends may stay as overnight guests.

C. All consumers in residential programs shall have an individual plan that addresses appropriate day treatment.

D. A monthly schedule of activities shall be shared with the consumer and available on request. Schedules shall be filed and maintained for review.

E. A record of income, earned, unearned, and consumer service fees, shall be maintained by the provider.

F. Residential facilities shall be located where school, church, recreation, and other community facilities are available.

G. An accurate record shall be kept of all funds deposited with the residential facility for use by a consumer. This record shall contain a list of deposits and withdrawals. Consumer purchases of over \$20.00, per item, shall be substantiated by receipts signed by the consumer and professional staff. A record shall be kept of consumer petty cash funds.

H. The program, in conjunction with the parent or guardian and the Division of Services for People With Disabilities support coordinator, shall apply for unearned income benefits for which a consumer is entitled.

KEY: human services, licensing

May 2, 2000

Notice of Continuation April 1 2015

62A-2-101 et seq.

R501. Human Services, Administration, Administrative Services, Licensing.**R501-20. Day Treatment Programs.****R501-20-1. Authority.**

Pursuant to Section 62A-2-101 et seq., the Office of Licensing, shall license day treatment programs according to the following rules.

R501-20-2. Purpose.

A day treatment program provides services to individuals who have emotional, psychological, developmental, physical, or behavioral dysfunctions, impairments, or chemical dependencies. Day treatment is provided in lieu of, or in coordination with, a more restrictive residential or inpatient environment or service in accordance with Subsection 62A-2-101(4).

R501-20-3. Definition.

Day treatment program means specialized treatment for less than 24 hours a day, for four or more persons who are unrelated to the owner or provider pursuant to Subsection 62A-2-101(4).

R501-20-4. Administration.

A. In addition to the following rules, all Day Treatment Programs shall comply with R501-2, Core Standards.

B. A list of current consumers shall be available and on-site at all times.

R501-20-5. Staffing.

A. The program shall have an employed manager who is responsible for the day to day supervision and operation of the facility. The responsibilities of the manager shall be clearly defined. Whenever the manager is absent, there shall be a substitute available.

B. The program shall have a staff person trained, by a certified instructor, in first aid and CPR on duty with the consumers at all times.

C. Staffing Ratios

1. The minimum ratio shall be one direct care staff to ten consumers. In Division of Services for People With Disabilities programs, consumer ratios shall be determined by type of activity.

2. When 10% or more of the consumers are non-ambulatory, the ratio shall be one direct care staff to seven consumers.

D. Professional staff shall include the following individuals who have received training in the specific area listed below:

1. Mental Health

a. a licensed physician, or consulting licensed physician,
b. a licensed psychologist, or consulting licensed psychologist,

c. a licensed mental health therapist or consulting licensed mental health therapist, and

d. a licensed advanced practice registered nurse-psychiatric mental health nurse specialist, or a consulting licensed advanced practice registered nurse-psychiatric mental health nurse specialist.

e. If unlicensed staff are used they shall be supervised by a licensed clinical professional.

2. Substance Abuse

a. a licensed physician or consulting licensed physician,
b. a licensed psychologist or consulting licensed psychologist,

c. a licensed mental health therapist or consulting licensed mental health therapist, and

d. a licensed substance abuse counselor or unlicensed staff who work with substance abuses shall be supervised by a

licensed clinical professional.

3. Children and Youth

a. a licensed physician, or consulting licensed physician,
b. a licensed psychologist, or consulting licensed psychologist,

c. a licensed mental health therapist or consulting licensed mental health therapist, to provide a minimum of one hour of service per week per consumer enrolled in the program, and

d. a licensed advanced practice registered nurse-psychiatric mental health nurse specialist, or consulting licensed advanced practice registered nurse-psychiatric mental health nurse specialist.

e. If unlicensed staff are used, they shall be trained to work with emotionally and behaviorally disturbed, or conduct disordered children and youth and shall be under the supervision of a licensed clinical professional.

4. Services for People With Disabilities

a. a staff person responsible for consumer supervision and operation of the facility, and

b. trained staff to provide the services and treatment stated in the consumer's plan.

R501-20-6. Direct Service.

A. Day treatment activity plans shall be prepared to meet individual consumer needs. Daily activity plans may include behavioral training, community living skills, work activity, work adjustment, recreation, self-feeding, self-care, toilet training, social appropriateness, development of gross and fine motor skills, interpersonal adjustment, mobility training, self-sufficiency training, and to encourage optimal mental or physical function, speech, audiology, physical therapy, and psychological services, counseling, and socialization.

B. A daily activity or service schedule shall be designed and implemented.

C. While on-site, consumers shall be supervised as necessary and encouraged to participate in activities.

D. All consumers shall be afforded the same quality of care.

R501-20-7. Physical Environment.

A. The program shall provide written documentation of compliance with the following:

1. local zoning ordinances,
2. local business license requirements,
3. local building codes,
4. local fire safety regulations,
5. local health codes, and
6. local approval from the appropriate government

agency for new program services or increased consumer capacity.

B. Building and Grounds

1. The program shall ensure that the appearance and cleanliness of the building and grounds are maintained.

2. The program shall take reasonable measures to ensure a safe physical environment for consumers and staff.

R501-20-8. Physical Facility.

A. The program shall have a minimum of fifty square feet of floor space per consumer designated specifically for day treatment. Hallways, office, storage, kitchens, and bathrooms will not be included in computation.

B. Outdoor recreational space and compatible recreational equipment shall be available when necessary to meet treatment plans.

C. Furniture and equipment shall be of sufficient quantity, variety, and quality to meet program and consumer needs and shall be maintained in a clean and safe condition.

D. The program shall have locked storage for hazardous chemicals and materials, according to the direction of the local fire authorities.

E. Equipment

Equipment for work activities shall be kept in safe operating condition.

1. Power equipment shall be installed and maintained in accordance with the National Electrical Code.

2. When operating power equipment, the operator shall wear safe clothing and protective eye gear.

3. Rings and watches are not to be worn, and long hair shall be confined when operating power equipment.

4. Consumer exposure to hazardous materials shall be controlled as defined in Utah State Industrial Regulations.

F. Bathrooms

1. The program shall have one or more bathrooms each for males and females in accordance with current uniform building codes. They shall be maintained in good operating order and in a clean and safe condition.

2. Bathrooms shall accommodate consumers with physical disabilities as required.

3. Bathrooms shall be properly equipped with toilet paper, towels, soap, and other items required for personal hygiene.

4. Bathrooms shall be ventilated by mechanical means or equipped with a screened window that opens.

R501-20-9. Food Service.

A. One person shall be responsible for food service. If this person is not a professionally qualified dietitian, regularly scheduled consultation with a professionally qualified dietitian shall be obtained. Meals served shall be from dietitian approved menus.

B. The person responsible for food service shall maintain a current list of consumers with special nutritional needs and record in the consumers service record information relating to special nutritional needs and provide for nutrition counseling where indicated.

C. When meals are prepared by consumers, there shall be a written policy to include the following:

1. rules of kitchen privileges,
2. menu planning and procedures,
3. nutritional and sanitation requirements, and
4. schedule of responsibilities.

D. The program shall provide adequate storage and refrigeration for meals carried to the program by consumers.

E. Kitchens shall have clean, operational equipment for the preparation, storage, serving, and clean up of all meals.

F. Adequate dining space shall be provided for consumers. The dining space shall be maintained in a clean and safe condition.

R501-20-10. Medication.

A. Prescriptive medication shall be provided as prescribed by a qualified person according to the Medical Practices Act.

B. The program shall have locked storage for medication.

C. The program shall have written policy and procedure to include the following:

1. self administered medication,
2. storage,
3. control, and
4. release and disposal of drugs in accordance with federal and state regulations.

KEY: human services, licensing

May 2, 2000

Notice of Continuation April 1, 2015

62A-2-101 et seq.

R501. Human Services, Administration, Administrative Services, Licensing.**R501-21. Outpatient Treatment Programs.****R501-21-1. Authority.**

Pursuant to Section 62A-2-101 et seq., the Office of Licensing, shall license outpatient treatment programs according to the following rules.

R501-21-2. Purpose.

Outpatient treatment programs shall serve consumers who require less structure than offered in day treatment or residential treatment programs. Consumers are provided treatment as often as determined and noted in the treatment plan.

R501-21-3. Definition.

Outpatient treatment program means individual, family, or group therapy or counseling designed to improve and enhance social or psychological functioning for those whose physical and emotional status allows them to continue functioning in their usual living environment in accordance with Subsection 62A-2-101(12).

R501-21-4. Administration.

A. In addition to the following rules, all Outpatient Treatment Programs shall comply with R501-2, Core Standards.

B. A current list of enrollment of all registered consumers shall be on-site at all times.

R501-21-5. Staffing.

Professional staff shall include at least one of the following individuals who has received training in the specific area listed below:

A. Mental Health

1. a licensed physician, or
2. a licensed psychologist, or
3. a licensed mental health therapist, or
4. a licensed advanced practice registered nurse-psychiatric mental health nurse specialist.

5. If unlicensed staff are used, they shall not supervise clinical programs. Unlicensed staff shall be trained to work with psychiatric consumers and be supervised by a licensed clinical professional.

B. Substance Abuse

1. a licensed physician, or
2. a licensed psychologist, or
3. a licensed mental health therapist, or
4. a licensed advanced practice registered nurse-psychiatric mental health nurse specialist.

5. A licensed substance abuse counselor or unlicensed staff who work with substance abusers shall be supervised by a licensed clinical professional.

6. Opioid outpatient treatment programs shall have a licensed physician who is an American Society of Addiction Medicine certified physician or who can document specific training in methadone treatment for opioid addictions or who can document specific training or experience in methadone treatment for opioid addictions. Physicians prescribing buprenorphine must show proof of completion of federally required physician training.

C. Children and Youth

1. a licensed psychiatrist, or
2. a licensed psychologist, or
3. a licensed mental health therapist, or
4. a licensed advanced practice registered nurse-psychiatric mental health nurse specialist.

5. If the following individuals are used they shall not supervise clinical programs: A person with a graduate degree

in counseling, psychiatric nursing, marriage and family therapy, social work or psychology who is working toward a clinical license, and has been approved by the Division of Occupational and Professional Licensing for the appropriate supervision, or a second year graduate student training for one of the above degrees.

D. Domestic Violence

1. a licensed psychiatrist, or
2. a licensed psychologist, or
3. a licensed clinical social worker, or
4. a licensed marriage and family therapist, or
5. a licensed professional counselor, or
6. a licensed advanced practice registered nurse-psychiatric mental health nurse specialist, or

7. a person with a graduate degree in counseling, psychiatric nursing, marriage and family therapy, social work or psychology who is working toward a clinical license, and has been approved by the Division of Occupational and Professional Licensing for the appropriate supervision, or

8. a second year graduate student in training for one of the above degrees, or

9. a licensed social services worker with at least three years of continual, full time, related experience, when practicing under the direction and supervision of a licensed clinical professional.

10. Individuals from categories 7. and 8. above shall not supervise clinical programs. Individuals in category 9 above shall not supervise clinical programs, and may only co-facilitate group therapy sessions with a person qualified per paragraphs 1. through 6. above.

R501-21-6. Direct Service.

A. Treatment plans shall be developed based on assessment and evaluation of individual consumer needs. The treatment may be consultative and may include medication management.

B. Treatment plans shall be reviewed and signed by a licensed clinical professional as frequently as determined in the treatment plan.

C. Except for Domestic Violence, individual, group, couple, or family counseling sessions shall be provided to the consumer as frequently as determined in the treatment plan. In the consumer's record and in the progress notes, the date of the session and the provider shall be documented. Treatment sessions may be provided less frequently than once a month if approved by the clinical supervisor and justified in the consumer record.

D. Domestic violence treatment programs shall comply with generally accepted practices in the current domestic violence literature and the following requirements:

1. Maintain and document cooperative working relationships with domestic violence shelters, treatment programs, referring agencies, custodial parents when the consumer is a minor and local domestic violence coalitions. If the consumer is a perpetrator, contact with victims, current partner, and the criminal justice referring agencies is also required, as appropriate.

2. Treatment sessions for each perpetrator, not including orientation and assessment interviews, shall be provided for at least one hour per week for a minimum of sixteen weeks. Treatment sessions for children and victims shall offer a minimum of 10 sessions for each consumer not including intake or orientation.

3. Staff to Consumer Ratio:

a. The staff to consumer ratio in adult treatment groups shall be one to eight for a one hour long group or one to ten for an hour and a half long group. The maximum group size shall not exceed sixteen.

b. Child victim or child witness groups shall have a ratio

of one staff to eight children when the consumers are under twelve years of age, and a one staff to ten children ratio when the consumers are twelve years of age or older.

c. When any consumer enters a treatment program the staff shall conduct an in-depth, face to face interview and assessment to determine the consumer's clinical profile and treatment needs. For perpetrator consumers, additional information shall be obtained from the police incident report, perpetrator's criminal history, prior treatment providers, and the victim. When appropriate, additional information for child consumers shall be obtained from parents, prior treatment providers, schools and Child Protective Services. When any of the above information cannot be obtained the reason shall be documented. The assessment shall include the following:

1) a profile of the frequency, severity and duration of the domestic violence behavior, which includes a summary of psychological violence,

2) documentation of any homicidal, suicidal ideation and intentions as well as abusive behavior toward children,

3) a clinical diagnosis and a referral for evaluation to determine the need for medication if indicated,

4) documentation of safety planning when the consumer is an adult victim, child victim, or child witness, and that they have contact with the perpetrator. For victims who choose not to become treatment consumers, safety planning shall be addressed when they are contacted, and

5) documentation that appropriate measures have been taken to protect children from harm.

4. Consumers deemed appropriate for a domestic violence treatment program shall have an individualized treatment plan, which addresses all relevant treatment issues. Consumers who are not deemed appropriate for domestic violence programs shall be referred to the appropriate resource, with the reasons for referral documented and notification given to the referring agency. Domestic violence counseling shall be provided when appropriate, concurrently with or after other necessary treatment.

5. Conjoint or group therapy sessions with victims and perpetrators together or with both co-perpetrators shall not be provided until a comprehensive assessment has been completed to determine that the violence has stopped and that conjoint treatment is appropriate. The perpetrator must complete a minimum of 12 domestic violence treatment sessions prior to implementing conjoint therapy.

6. A written procedure shall be implemented to facilitate the following in an efficient and timely manner:

a. entry of the court ordered defendant into treatment,

b. notification of consumer compliance, participation or completion,

c. disposition of non-compliant consumers,

d. notification of the recurrence of violence, and

e. notification of factors which may exacerbate an individual's potential for violence.

7. Comply with the "Duty to Warn," Section 78B-3-502.

8. Document specialized training in domestic violence assessment and treatment practices including 24 hours of pre-service training within the last two years and 16 hours of training annually thereafter for all individuals providing treatment services.

9. Clinical supervision for treatment staff who are not clinically licensed shall consist of a minimum of an hour a week to discuss clinical dynamics of cases.

E. Opioid outpatient treatment programs shall:

1. Admit consumers to the program and dispense medications only after the completion of a face to face visit with a licensed practitioner having authority to prescribe controlled substances who confirms the opioid dependence. A licensed practitioner having authority to prescribe controlled

substances must approve every subsequent dose increase prior to the change.

2. Assume all consumers see the physician at least once yearly.

3. Require all consumers admitted to the program to participate in random, drug testing. Drug testing will be performed by the program minimally, 2 times per month for the first 3 months of treatment, and monthly thereafter, except for a consumer whose lack of progress shall require more frequent drug testing for a longer period of time.

4. Require consumers to participate in counseling sessions at least 1 hour per week for the first 90 days. Upon successful completion of this phase of treatment, consumers shall be required to participate in counseling 2 hours per month for the next 6 months. Upon successful completion of 9 months of treatment, consumers shall be seen at least monthly thereafter until discharge. Exceptions to this requirement must be approved in writing by the Division of Substance Abuse and Mental Health.

5. Maintain a staff to consumer ratio of:

a. 1 counselor to every 50 consumers.

b. 1 hour of physician time at the program site each month for every 10 consumers enrolled.

c. 1 FTE nurse to dispense medications for every 150 consumers dosing on an average daily basis.

6. Comply with R523-21-1 Rules Governing Methadone Providers.

R501-21-7. Physical Environment.

A. The program shall provide written documentation of compliance with the following:

1. local zoning ordinances,
2. local business license requirements,
3. local building codes,
4. local fire safety regulations, and
5. local health codes.

B. Building and Grounds

1. The program shall ensure that the appearance and cleanliness of the building and grounds are maintained.

2. The program shall take reasonable measures to ensure a safe physical environment for consumers and staff.

R501-21-8. Physical Facility.

A. Space shall be provided for private and group counseling sessions.

B. The program shall have storage for the following:

1. locked storage for medications, and
2. locked storage for hazardous chemicals and materials, according to the direction of the local fire authorities.

C. Equipment

1. Furniture and equipment shall be of sufficient quantity, variety, and quality to meet program and consumer plans.

2. All furniture and equipment shall be maintained in a clean and safe condition.

D. Bathrooms

1. Bathrooms shall accommodate physically disabled consumers.

2. Each bathroom shall be maintained in good operating order and be properly equipped with toilet paper, towels, and soap.

3. Bathrooms shall be ventilated by mechanical means or equipped with a screened window that opens.

KEY: human services, licensing, outpatient treatment programs

November 3, 2014

62A-2-101 et seq.

Notice of Continuation April 1, 2015

R501. Human Services, Administration, Administrative Services, Licensing.**R501-22. Residential Support Programs.****R501-22-1. Authority.**

Pursuant to Section 62A-2-101 et seq., the Office of Licensing, shall license residential support programs according to the following rules.

R501-22-2. Purpose.

This rule establishes basic health and safety standards for residential support programs.

R501-22-3. Definition.

Residential Support is as defined in section 62A-2-101. Temporary Homeless Youth Shelter is as defined in Section 62A-4a-501.

R501-22-4. Administration.

A. In addition to the following rules, all Residential Support Programs shall comply with R501-2, Core Standards.

B. The program shall ensure that consumers receive direct service from an assigned worker or other appropriate professional.

C. A list of current consumers shall be available and on-site at all times.

R501-22-5. Staffing.

A. The program shall have an employed manager responsible for the day to day resident supervision and operation of the facility. The responsibilities of the manager shall be clearly defined. Whenever the manager is absent there shall be a substitute to assume managerial responsibility. With the exception of Domestic Violence Shelters, adult programs are not required to provide twenty four hour supervision.

B. The program shall make arrangement for medical backup with a medical clinic or physician licensed to practice medicine in the State of Utah.

C. The program shall have at least one person on duty who has completed and remains current in a certified first aid and CPR program.

D. Programs which utilize students and volunteers, shall provide screening, training, and evaluation of volunteers. Volunteers providing care in Domestic Violence Shelters, without paid staff present, shall have direct communication access to designated staff at all times. Volunteers shall be informed verbally and in writing of program objectives and scope of service.

R501-22-6. Direct Service.

This section supersedes core standards, Section R501-2-8.

A. The program consumer records shall contain the following:

1. name, address, telephone number, admission date, and personal information required by the program,
2. emergency information with names, address, and telephone numbers,
3. a statement indicating that the resident meets the admission criteria,
4. description of presenting problems,
5. service plan and services provided, and referral arrangements as required by the program,
6. discharge date,
7. signature of person or persons, or designee providing services, and
8. crisis intervention and incident reports.

B. The program's consumer service plan shall offer and document as many life enhancement opportunities as are

appropriate and reasonable.

C. Domestic Violence Shelter action plans shall include the following:

1. a review of danger and lethality with victim and discussion of the level of the victim's risk of safety.
2. a review of safety plan with the victim,
3. a review of the procedure for a protective order and referral to appropriate agency or clerk of the court authorized to issue the protective order, and
4. a review of supportive services to include, but not limited to medical, self-sufficiency, day care, legal, financial, and housing assistance. The program shall facilitate connecting services to those resources as requested. Appropriate referrals shall be made, when indicated, and documented in the consumer record for victim treatment, psychiatric consultation, drug and alcohol treatment, or other allied services.
5. Domestic Violence Shelter staff completing action plans shall have at least a Bachelor's Degree in Behavioral Sciences.

R501-22-7. Physical Environment.

A. The program shall provide written documentation of compliance with the following:

1. local zoning ordinances,
2. local business license requirements,
3. local building codes,
4. local fire safety regulations,
5. local health codes, and
6. local approval from the appropriate government agency for new program services or increased consumer capacity.

B. Building and Grounds

1. The program shall ensure that the appearance and cleanliness of the building and grounds are maintained.
2. The program shall take reasonable measures to ensure a safe physical environment for its consumers and staff.

R501-22-8. Physical Facility.

A. Live-in staff shall have separate living space with a private bathroom.

B. The program shall have space to serve as an administrative office for records, secretarial work and bookkeeping.

C. Space shall be provided for private and group counseling sessions.

D. Bathrooms -- The following bathroom standards shall apply.

1. There shall be separate bathrooms, including a toilet, lavatory, tub or shower, for males and females. These shall be maintained in good operating order and in a clean and safe condition.
2. Consumer to bathroom ratios shall be 10 to one.
3. Bathrooms shall accommodate consumers with physical disabilities, as required.
4. Each bathroom shall be maintained in good operating order and be equipped with toilet paper, towels, and soap.
5. There shall be mirrors secured to the walls at convenient heights.
6. Bathrooms shall be placed as to allow access without disturbing other residents during sleeping hours.
7. Bathrooms shall be ventilated by mechanical means or equipped with a screened window that opens.
8. Domestic Violence Shelters Bathrooms
 - a. family members may share bathrooms, and
 - b. where bathrooms are shared by more than one family or by children over the age of eight, parents or program staff shall ensure that privacy is protected.
9. Temporary Homeless Youth Shelters Bathrooms

- a. Single occupancy unisex bathrooms are permissible.
- E. Sleeping Accommodations
 - 1. A minimum of 60 square feet per consumer shall be provided in a multiple occupant bedroom and 80 square feet in a single occupant bedroom. Storage space shall not be counted.
 - 2. Sleeping areas shall have a source of natural light, and shall be ventilated by mechanical means or equipped with a screened window that opens.
 - 3. Each bed, none of which shall be portable, shall be solidly constructed and be provided with clean linens after each consumer stay and at least weekly.
 - 4. Sleeping quarters serving male and female residents shall be structurally separated.
 - 5. Consumers shall be allowed to decorate and personalize bedrooms with respect for other residents and property.
 - 6. For Domestic Violence Shelters, Family Support Centers, Temporary Homeless Youth Shelters and children's shelters, the following shall apply:
 - a. A minimum of 40 square feet per consumer shall be provided in a multiple occupant bedroom. Storage space shall not be counted. The use of one crib for children under two years of age shall not be counted in the square foot requirement as long as it does not inhibit access to and from the room.
 - b. Roll away and hide-a-beds may be used as long as the consumer square foot requirement is maintained.
 - c. Family members are allowed to share bedrooms. Where bedrooms are shared by more than one family, parents or program staff shall make appropriate arrangements to ensure privacy is protected.
 - 7. For Temporary Homeless Youth Shelters, the following shall apply:
 - a. A minimum of 40 square feet per consumer shall be provided in a multiple occupant dormitory style bedroom. Storage space shall not be counted.
 - b. For youth with their own children, a minimum of 40 square feet per person shall be provided in an separately enclosed bedroom that houses only youth that have their own children. Storage space shall not be counted.
 - F. Equipment
 - 1. Furniture and equipment shall be of sufficient quantity, variety, and quality to meet program and consumer needs.
 - 2. All furniture and equipment shall be maintained in a clean and safe condition.
 - G. Storage
 - 1. The program shall have locked storage for medications.
 - 2. The program shall have locked storage for hazardous chemicals and materials, according to the direction of the local fire authorities.
 - 3. Any weapons brought into the facility shall be secured in a locked storage area or removed from the premises.
 - H. Laundry Service
 - 1. Programs which permit consumers to do their own laundry shall provide equipment and supplies for washing, drying, and ironing.
 - 2. Programs which provide for common laundry of linens and clothing, shall provide containers for soiled laundry separate from storage for clean linens and clothing.
 - 3. Laundry appliances shall be maintained in good operating order and in a clean and safe condition.

R501-22-9. Food Service.

- A. One staff shall be responsible for food service. If this person is not a professionally qualified dietitian, regularly

scheduled consultation with a professionally qualified dietitian shall be obtained. Meals served shall be from dietitian approved menus.

- B. The staff responsible for food service shall maintain a current list of consumers with special nutritional needs and record in the consumer's service record information relating to special nutritional needs and provide for nutritional counseling where indicated.

- C. The program shall establish and post kitchen rules and privileges according to consumer needs.

- D. Consumers present in the facility for four or more consecutive hours shall be provided nutritious food.

- E. Meals may be prepared at the facility or catered.

- F. Kitchens shall have clean, safe operational equipment for the preparation, storage, serving, and clean-up of all meals.

- G. Adequate dining space shall be provided for consumers. The dining space shall be maintained in a clean and safe condition.

- H. When meals are prepared by consumers, there shall be a written policy to include the following:

- 1. rules of kitchen privileges,
- 2. menu planning and procedures,
- 3. nutritional and sanitation requirements, and
- 4. schedule of responsibilities.

R501-22-10. Specialized Services for Substance Abuse.

- A. The program shall not admit anyone who is currently experiencing convulsions, in shock, delirium tremens, in a coma or unconscious.

- B. Before admission, consumers shall be tested for Tuberculosis. Both consumers and staff shall be tested annually or as directed by the local health requirements.

R501-22-11. Specialized Services for Programs Serving Children.

- A. The program shall provide clean and safe age appropriate toys for children.

- B. The program shall provide an outdoor play area enclosed with a five foot safety fence.

- C. Only custodial parents, legal guardian, or persons designated in writing, are allowed to remove any child from the program.

- D. The program shall provide adequate staff to supervise children at all times.

R501-22-12. Specialized Services for Domestic Violence Shelters.

- A. The program shall provide clean and safe age appropriate toys for children.

- B. The program shall provide an outdoor play area enclosed with a five foot safety fence.

- C. The program shall provide and document the following information both verbally and in writing to the consumer: Shelter rules, reason for termination, and confidentiality issues.

- D. Parents are responsible for supervising their children while at the shelter. If parents are required to be away from the shelter or involved in shelter activities without their children, they shall arrange for appropriate child care services.

R501-22-13. Specialized Services for Temporary Homeless Youth Shelters.

- A. Temporary Homeless Youth Shelters shall provide a staff ratio of no less than one direct care staff to ten youth.

- B. The age of the youth to be admitted shall be between 12 years of age and 17 years of age. Youth may be admitted with their own biological children of any age.

C. Youth shall be assessed by facility staff who meet the qualifications of a mental health therapist as defined in Section 58-60-102, to determine whether they are an imminent risk of harming themselves or others. Youth who are assessed as an imminent risk shall be referred to programs qualified to serve them.

D. Temporary Homeless Youth Shelters shall comply with Section 62A-4a-501 regarding mandatory notifications.

E. Temporary Homeless Youth Shelters shall comply with Section 62A-2-108.1 to coordinate educational requirements for all youth admitted.

KEY: human services, licensing

October 23, 2014

Notice of Continuation April 1, 2015

62A-2-101 et seq.

R590. Insurance, Administration.**R590-164. Uniform Health Billing Rule.****R590-164-1. Authority.**

This rule is promulgated by the Insurance Commissioner pursuant to Subsection 31A-22-614.5 which authorizes the commissioner to adopt uniform claim forms, billing codes, and compatible systems of electronic billing.

R590-164-2. Purpose.

The purpose of this rule is to designate uniform claim forms, billing codes and compatible electronic data interchange standards for use by health payers and providers.

R590-164-3. Applicability and Scope.

(1) This rule applies to health claims, health encounters, and electronic data interchange between payers and providers.

(2) Except as otherwise specifically provided, the requirements of this rule apply to payers and providers.

(3) This rule does not prohibit a payer from requesting additional information required to determine eligibility of the claim under the terms of the policy or certificate issued to the claimant.

(4) This rule does not prohibit a payer or provider from using alternative forms or procedures specified in a written contract between the payer and provider.

(5) This rule does not exempt a payer or provider from data reporting requirements under state or federal law or regulation.

R590-164-4. Definitions.

As used in this rule:

(1) Uniform Claim Forms are defined as:

(a) "UB-04" means the health insurance claim form maintained by NUBC for use by institutional care providers.

(b) "Form CMS 1500" means the health insurance claim form maintained by NUCC for use by health care providers.

(c) "J400" means the uniform dental claim form approved by the American Dental Association for use by dentists.

(d) "NCPDP" means the National Council for Prescription Drug Program's Claim Form or its electronic counterpart.

(2) Uniform Claim Codes are defined as:

(a) "ASA Codes" means the codes contained in the ASA Relative Value Guide developed and maintained by the American Society of Anesthesiologists to describe anesthesia services and related modifiers.

(b) "CDT Codes" means the current dental terminology prescribed by the American Dental Association.

(c) "CPT Codes" means the current physicians procedural terminology, published by the American Medical Association.

(d) "DRG Codes" means Diagnosis Related Group codes. DRG's are universal grouping that are used to clarify the type of inpatient care received. The DRG code, along with a diagnosis code and the length of the inpatient stay, are used to determine payment and reimbursement for claims.

(e) "HCPCS" means HCFA's Common Procedure Coding System, a coding system that describes products, supplies, procedures and health professional services and includes, the American Medical Association's (AMA's) Physician Current Procedural Terminology, codes, alphanumeric codes, and related modifiers. This includes:

(i) "HCPCS Level 1 Codes" which are the AMA's CPT codes and modifiers for professional services and procedures.

(ii) "HCPCS Level 2 Codes" which are national alphanumeric codes and modifiers for health care products and supplies, as well as some codes for professional services not included in the AMA's CPT codes.

(f) "ICDCM Codes" means the diagnosis and procedure codes in the International Classification of Diseases, clinical modifications published by the U.S. Department of Health and Human Services.

(g) "NDC" means the National Drug Codes of the Food and Drug Administration.

(h) "UB04 Rate Codes" means the code structure and instructions established for use by the National Uniform Billing Committee.

(3) "Electronic Data Interchange Standard" means the:

(a) ASC X12N standard format developed by the Accredited Standards Committee X12N Insurance Subcommittee of the American National Standards Institute and the ASC X12N implementation guides as modified by the Utah Health Information Network (UHIN) Standards Committee;

(b) other standards developed by the UHIN Standards Committee at the request of the commissioner; and

(c) as adopted by the commissioner by rule.

(4) "HPID" means Health Plan Identifier. HPID is the national unique health plan identifier assigned to identify individual health plans.

(5) "NPI" means National Provider Identifier. A NPI is a unique ten digit identification number required by HIPAA for all health care providers in the United States. Providers must use their NPI to identify themselves in all HIPAA transactions.

(6) "Payer" means an insurer or third party administrator that pays for, or reimburses for the costs of health care expense.

(7) "Provider" means any person, partnership, association, corporation or other facility or institution that renders or causes to be rendered health care or professional services, and officers, employees or agents of any of the above acting in the course and scope of their employment.

(8) "UHIN Standards Committee" means the Standards Committee of the Utah Health Information Network.

(9) "CMS" means the Centers for Medicare and Medicaid Services of the U.S. Department of Health and Human Services. CMS replaced HCFA.

(10) "HIPAA" means the federal Health Insurance Portability and Accountability Act.

(11) "NUBC" means the National Uniform Billing Committee.

(12) "NUCC" means the National Uniform Claim Committee.

R590-164-5. Paper Claim Transactions.

Payers shall accept and may require the applicable uniform claim forms completed with the uniform claim codes.

R590-164-6. Electronic Data Interchange Transactions.

(1) The commissioner shall use the UHIN Standards Committee to develop electronic data interchange standards for use by payers and providers transacting health insurance business electronically. In developing standards for the commissioner, the UHIN Standards Committee shall consult with national standard setting entities including but not limited to Centers for Medicare and Medicaid Services (CMS), the National Uniform Claim Form Committee, ASC X12, NCPDP, and the National Uniform Billing Committee.

(2) Standards developed and adopted by the UHIN Standards Committee shall not be required for use by payers and providers, until adopted by the commissioner by rule.

(3) Payers shall accept the applicable electronic data if transmitted in accordance with the adopted electronic data interchange standard. Payers may reject electronic data if not transmitted in accordance with the adopted electronic data interchange standard.

(4) The following HIPAA+ electronic data interchange standards developed and adopted by the UHIN Standards Committee and adopted by the commissioner are hereby incorporated by reference with this rule and are available for public inspection at the department during normal business hours or at www.insurance.utah.gov.

(a) "Administrative Transaction Acknowledgements Standard v3.0." Purpose: To create a process for acknowledging all electronic transactions between trading partners based on the communication, syntax semantic and business process specifications.

(b) "Anesthesia Standard v3.0." Purpose: to standardize the transmission of anesthesia data for health care services. This standard does not alter any contractual agreement between providers and payers.

(c) "Benefits Enrollment and Maintenance Standard v3.0." Purpose: To detail the standard transactions for the transmission of health care benefits enrollment and maintenance.

(d) "CMS 1500 Paper Claim Form Box 17 and 17A Standard v3.1." Purpose: To establish a standard approach to reporting referring provider name and identifier number on the claim form. This standard also provides the cross walk to the ASCX12 837 Professional Claim version 005010x222A1.

(e) "CMS 1500 Paper Claim Form Standard v3.0." Purpose: To clearly describe the standard use of each Box, for print images, and its crosswalk to the HIPAA 837 005010X222A1 Professional implementation guide.

(f) "Claim Acknowledgement Standard v3.1." Purpose: To provide a standardized claim acknowledgement in response to a claim submission. This transaction is used to report on the status of a claim/encounter at the pre-adjudication processing stage, for example, before the payer is legally required to keep a history of the claim or encounter.

(g) "Claim Status Inquiry and Response Standard v3.1." Purpose: To detail the standard transactions for the transmission of health care claim status inquiries and response after January 1, 2012. The transaction is intended to allow the provider to reduce the need for claim follow-up and facilitate the correction of claims.

(h) "Coordination of Benefits Standard v3.0." Purpose: To streamline the coordination of benefits process between payers and providers or payer to payers. The standard is to define the data to be exchanged for coordination of benefits and to increase effective communications.

(i) "Dental Claim Billing Standard v3.1." Purpose: To describe the standard use of each item number, for print images, and its crosswalk to the HIPAA 837 005010X0224A1 dental implementation guide.

(j) "Electronic Remittance Advice Standard v 3.4." Purpose: To detail the standard transaction for the reporting of transmission receipt and transaction or functional group X12 and implementation guide errors. This standard adopts the use of the ASC X12 999 transaction.

(k) "Eligibility Inquiry and Response Standard v3.1." Purpose: To detail the standard transactions for the transmission of health care eligibility inquiries and responses.

(l) "Health Care Claim Encounter Standard v3.2." Purpose: To detail the standard transactions for the transmission of health care claims and encounters and associated transactions.

(m) "Health Identification Card Standard v1.2." Purpose: To standardize the patient health identification card information. This identification card addresses the human-readable appearance and machine-readable information used by the healthcare industry to obtain eligibility.

(n) "Home Health Standard v3.0." Purpose: To provide a uniform standard of billing for home health care claims and encounters.

(o) "Implementation Acknowledgement For Health Care Insurance v3.2." Purpose: To detail the standard transaction for the reporting of transmission receipt and transaction or functional group X12 and implementation guide error. This standard adopts the use of the ASC X12 999 transaction.

(p) "Individual Name Standard v2.0." Purpose: To provide guidance for entering names into provider, payer or sponsor systems for patients, enrollees, as well as all other people associated with these records.

(q) "Medicaid Enrollment Implementation Guide v3.0." Purpose: This standard establishes the use of the ASC X12 834 enrollment transaction for Medicaid enrollments.

(r) "Metabolic Dietary Products Standard v3.0." Purpose: To provide a uniform standard for billing of metabolic dietary products for those providers and payers using the UB04, the CMS 1500, the NCPDP, or an electronic equivalent.

(s) "National Provider Identifier Standard v3.0." Purpose: To inform providers of the national provider identifier requirements and the usage within the transactions.

(t) "Pain Management Standard v3.0." Purpose: To provide a uniform method of submitting pain management claims, encounters, pre-authorizations, and notifications.

(u) "Patient Identification Number Standard v3.0." Purpose: To describe the standard for the patient identification number.

(v) "Premium Payment Standard v3.0." Purpose: To detail the standard transactions for the transmission of premium payments.

(w) "Prior Authorization/Referral Standard v3.0." Purpose: To provide general recommendations to payers and providers about handling electronic prior authorization and referrals.

(x) "Required Unknown Values Standard v 3.0." Purpose: To provide guidance for the use of common data values that can be used within the HIPAA transactions when a required data element is not known by the provider, payer or sponsor for patients, enrollees, as well as all other people associated with these transactions. These data values should only be used when the data is truly not available or known. These values should not be used to replace known data.

(y) "Telehealth Standard v3.0." Purpose: To provide a uniform standard of billing for health care claims and encounters delivered via telehealth.

(z) "Transparency Administration Performance Standard v 1.0." Purpose: To establish performance measures that report the average telephone answer time and claim turnaround time.

(aa) "Transparency Denial Standard v 1.1." Purpose: To establish performance measures that report the number and cost of an insurer's denied health claims and to provide guidance pertaining to the reporting method and timeline.

(bb) "UB04 Form Locator Elements Standard v3.0." Purpose: To clearly describe the use of each form locator in the UB04 claim billing form and its crosswalk to the HIPAA 837 005010X223A2 institutional implementation guide.

R590-164-7. Separability.

If any provision of this rule or the application to any person or circumstance is for any reason held to be invalid, the remainder of the rule and the application of the provision to other persons or circumstances may not be affected.

KEY: insurance law

February 25, 2013

Notice of Continuation March 10, 2015

31A-22-614.5

R590. Insurance, Administration.**R590-256. Health Benefit Plan Internet Portal Solvency Rating.****R590-256-1. Authority.**

This rule is promulgated by the Insurance Department pursuant to Utah Code Sections:

- (1) 63G, Chapter 3, Utah Administrative Rule Making Act; and
- (2) 31A-22-635(7) which requires the Insurance Department to establish a methodology establishing a calendar year solvency rating to be posted on the internet portal.

R590-256-2. Purpose and Scope.

- (1) The purpose of this rule is to establish the methodology for determining the solvency rating for each insurer who posts a health benefit plan on the Internet portal.
- (2) The scope of this rule applies only to insurers who post a health benefit plan on the internet portal.

R590-256-3. Definitions.

In addition to the definitions in Sections 31A-1-301 and 31A-17-601, the following definitions shall apply for the purpose of this rule:

- (1) "Insurer" means an insurer who posts a health benefit plan on the Internet portal under 63M-1-2504(2)(a).

R590-256-4. Solvency Rating Methodology.

- (1) An insurer's solvency rating shall fall within one of three tiers:
 - (a) Solvent;
 - (b) Hazardous; or
 - (c) Insolvent.
- (2) An insurer shall have a solvency rating of solvent if the insurer's annual risk based capital report demonstrates that the insurer is not in an action level event defined under Sections 31A-17-603 to 606.
- (3) An insurer shall have a solvency rating of hazardous if the insurer's annual risk based capital report demonstrates the insurer is in an action level event defined under Sections 31A-17-603 or 604.
- (4) An insurer shall have a solvency rating of insolvent if the insurer's annual risk based capital report demonstrates that the insurer is in an action level event defined under Sections 31A-17-605 or 606.

R590-256-5. Enforcement Date.

The Commissioner will begin enforcing this rule on the effective date of this rule.

R590-256-6. 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 internet portal**March 10, 2010****Notice of Continuation March 10, 2015****63G-3****63M-1-2506**

R606. Labor Commission, Antidiscrimination and Labor, Antidiscrimination.**R606-6. Regulation of Practice and Procedure on Employer Reports and Records.****R606-6-1. Authority.**

This rule is established pursuant to Section 34A-5-104.

R606-6-2. Procedures and Prohibitions.

A. Employers subject to the jurisdiction of the U.S. Equal Employment Opportunity Commission shall not be required to furnish information to the Division which is a duplication of that filed on Standard Form 100, Employer Information EEO-1 Report. The Division reserves the right to require reports about the employment practices of individual employers, or groups of employers, whenever such information has not been furnished to the Equal Employment Opportunity Commission.

B. The provision respecting confidentiality of information contained in Section 709(e) of the U.S. Civil Rights Act of 1964 shall be observed by Commission and all Commission staff.

C. Any personnel or employment record made or kept by an employer (including but not necessarily limited to application forms submitted by applicants and other records having to do with hiring, promotion, demotion, transfer, layoff or termination, rates of pay or other terms of compensation, and selection for training or apprenticeship) shall be preserved by the employer for a period of six months from the date of the making of the record and the personnel action involved, whichever occurs later. In case of involuntary termination of an employee, the personnel records of the individual terminated shall be kept for a period of six months from the date of termination. Where a complaint of discrimination has been filed, the respondent employer shall preserve all personnel records relevant to the complaint and to the charging party until final disposition of the complaint. The term "personnel records relevant to the complaint", for example, would include personnel or employment records relating to the charging party and to all other employees holding positions similar to that held or sought by the charging party and application forms or test papers completed by an unsuccessful applicant or by all other candidates for the same position as that for which the charging party applied and was rejected. The date of "final disposition of the complaint" means the date of the final agency action or the end of the appeals process.

D. If a person fails to make, keep, or preserve records or make reports in accordance with the Act and rules, the district court for the county in which such person is found, resides, or has his principal place of business, upon application of the Commission, may issue an order requiring compliance.

KEY: discrimination, personnel files

1990

34A-5-101 et seq.

Notice of Continuation March 30, 2015

R657. Natural Resources, Wildlife Resources.**R657-5. Taking Big Game.****R657-5-1. Purpose and Authority.**

(1) Under authority of Sections 23-14-18 and 23-14-19, the Wildlife Board has established this rule for taking deer, elk, pronghorn, moose, bison, bighorn sheep, and Rocky Mountain goat.

(2) Specific dates, areas, methods of take, requirements, and other administrative details which may change annually are published in the guidebook of the Wildlife Board for taking big game.

R657-5-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "Antlerless deer" means a deer without antlers or with antlers five inches or shorter.

(b) "Antlerless elk" means an elk without antlers or with antlers five inches or shorter.

(c) "Antlerless moose" means a moose with antlers shorter than its ears.

(d) "Arrow quiver" means a portable arrow case that completely encases all edges of the broadheads.

(e) "Buck deer" means a deer with antlers longer than five inches.

(f) "Buck pronghorn" means a pronghorn with horns longer than five inches.

(g) "Bull elk" means an elk with antlers longer than five inches.

(h) "Bull moose" means a moose with antlers longer than its ears.

(i) "Cow bison" means a female bison.

(j) "Doe pronghorn" means a pronghorn without horns or with horns five inches or shorter.

(k) "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 and safety attached to the device.

(l) "Hunter's choice" means either sex may be taken.

(m) "Limited entry hunt" means any hunt published in the hunt tables of the guidebook of the Wildlife Board for taking big game, which is identified as limited entry and does not include general or once-in-a-lifetime hunts.

(n) "Limited entry permit" means any permit obtained for a limited entry hunt by any means, including conservation permits, wildlife expo permits, sportsman permits, cooperative wildlife management unit permits and limited entry landowner permits.

(o) "Once-in-a-lifetime hunt" means any hunt published in the hunt tables of the guidebook of the Wildlife Board for taking big game, which is identified as once-in-a-lifetime, and does not include general or limited entry hunts.

(p) "Once-in-a-lifetime permit" means any permit obtained for a once-in-a-lifetime hunt by any means, including conservation permits, wildlife expo permits, sportsman permits, cooperative wildlife management unit permits and limited entry landowner permits.

(q) "Ram" means a male desert bighorn sheep or Rocky Mountain bighorn sheep.

(r) "Spike bull" means a bull elk which has at least one antler beam with no branching above the ears. Branched means a projection on an antler longer than one inch, measured from its base to its tip.

(s) "Drone" means an autonomously controlled, aerial vehicle of any size or configuration that is capable of controlled flight without a human pilot aboard.

R657-5-3. License, Permit, and Tag Requirements.

(1) A person may engage in hunting protected wildlife or in the sale, trade, or barter of protected wildlife or its parts in accordance with Section 23-19-1 and the rules or guidebooks of the Wildlife Board.

(2) Any license, permit, or tag that is mutilated or otherwise made illegible is invalid and may not be used for taking or possessing big game.

(3) A person must possess or obtain a Utah hunting or combination license to apply for or obtain any big game hunting permit.

R657-5-4. Age Requirements and Restrictions.

(1)(a) Subject to the exceptions in subsection (c), a person 12 years of age or older may apply for or obtain a permit to hunt big game. A person 11 years of age may apply for a permit to hunt big game if that person's 12th birthday falls within the calendar year for which the permit is issued.

(b) A person may not use a permit to hunt big game before their 12th birthday.

(c) A person who is younger than 14 years of age may not apply for or obtain the following types of big game permits issued by the division through a public drawing:

(i) premium limited entry;

(ii) limited entry;

(iii) once-in-a-lifetime; and

(iv) cooperative wildlife management unit.

(d) A person who is 13 years of age may apply for or obtain a type of permit listed in Subsection(1)(c) if that person's 14th birthday falls within the calendar year for which the permit is issued.

(e) antlerless deer, antlerless elk, and doe pronghorn permits are not limited entry, premium limited entry or cooperative wildlife management unit permits for purposes of determining a 12 or 13 year olds eligibility to apply for or obtain through a public drawing administered by the division.

(2)(a) A person at least 12 years of age and under 16 years of age must be accompanied by his parent or legal guardian, or other responsible person 21 years of age or older and approved by his parent or guardian, while hunting big game with any weapon.

(b) As used in this section, "accompanied" means at a distance within which visual and verbal communication are maintained for the purposes of advising and assisting.

R657-5-5. Duplicate License and Permit.

(1) Whenever any unexpired license, permit, tag or certificate of registration is destroyed, lost or stolen, a person may obtain a duplicate from a division office or online license agent, for ten dollars or half of the price of the original license, permit, or certificate of registration, whichever is less.

(2) The division may waive the fee for a duplicate unexpired license, permit, tag or certificate of registration provided the person did not receive the original license, permit, tag or certificate of registration.

R657-5-6. Hunting Hours.

Big game may be taken only between one-half hour before official sunrise through one-half hour after official sunset.

R657-5-7. Prohibited Weapons.

(1) A person may not use any weapon or device to take big game other than those expressly permitted in this rule.

(2) 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. Laser range finding devices are exempt from this restriction.

R657-5-8. Rifles and Shotguns.

(1) The following rifles and shotguns may be used to take big game:

- (a) any rifle firing centerfire cartridges and expanding bullets; and
- (b) a shotgun, 20 gauge or larger, firing only 00 or larger buckshot or slug ammunition.

R657-5-9. Handguns.

(1) A handgun may be used to take deer and pronghorn, provided the handgun is a minimum of .24 caliber, fires a centerfire cartridge with an expanding bullet and develops 500 foot-pounds of energy at the muzzle.

(2) A handgun may be used to take elk, moose, bison, bighorn sheep, and Rocky Mountain goat provided the handgun is a minimum of .24 caliber, fires a centerfire cartridge with an expanding bullet and develops 500 foot-pounds of energy at 100 yards.

R657-5-10. Muzzleloaders.

(1) A muzzleloader may be used during any big game hunt, except an archery hunt, provided the muzzleloader:

- (a) can be loaded only from the muzzle;
- (b) has open sights, peep sights, or a fixed non-magnifying 1x scope, except as provided in Subsection (4) and R657-12;
- (c) has a single barrel;
- (d) has a minimum barrel length of 18 inches;
- (e) is capable of being fired only once without reloading;

(f) powder and bullet, or powder, sabot and bullet are not bonded together as one unit for loading;

(g) is loaded with black powder or black powder substitute, which must not contain smokeless powder.

(2)(a) A lead or expanding bullet or projectile of at least 40 caliber must be used to hunt big game.

(b) A bullet 130 grains or heavier, or a sabot 170 grains or heavier must be used for taking deer and pronghorn.

(c) A 210 grain or heavier bullet must be used for taking elk, moose, bison, bighorn sheep, and Rocky Mountain goat, except sabot bullets used for taking these species must be a minimum of 240 grains.

(3)(a) A person who has obtained a muzzleloader permit for a big game hunt may:

(i) use only muzzleloader equipment authorized in this Subsections (1) and (2) to take the species authorized in the permit; and

(ii) not possess or be in control of a rifle or shotgun while in the field during the muzzleloader hunt.

(A) "Field" for purposes of this section, means a location where the permitted species of wildlife is likely to be found. "Field" does not include a hunter's established campsite or the interior of a fully enclosed automobile or truck.

(b) The provisions of Subsection (a) do not apply to:

(i) a person licensed to hunt upland game or waterfowl provided the person complies with Rules R657-6 and R657-9 and the Upland Game Guidebook and Waterfowl Guidebook, respectively, and possessing only legal weapons to take upland game or waterfowl;

(ii) a person licensed to hunt big game species during hunts that coincide with the muzzleloader hunt;

(iii) livestock owners protecting their livestock; or

(iv) 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 protected wildlife.

(4) A person who has obtained an any weapon permit for a big game hunt may use muzzleloader equipment

authorized in this Section to take the species authorized in the permit, including a fixed or variable magnifying scope.

R657-5-11. Archery Equipment.

(1) Archery equipment may be used during any big game hunt, except a muzzleloader hunt, provided:

- (a) the minimum bow pull is 40 pounds at the draw or the peak, whichever comes first; and
- (b) arrowheads used have two or more sharp cutting edges that cannot pass through a 7/8 inch ring;
- (c) expanding arrowheads cannot pass through a 7/8 inch ring when expanded, and
- (d) arrows must be a minimum of 20 inches in length from the tip of the arrowhead to the tip of the nock, and must weigh at least 300 grains.

(2) The following equipment or devices may not be used to take big game:

(a) a crossbow, except as provided in Subsection (5) and Rule R657-12;

(b) arrows with chemically treated or explosive arrowheads;

(c) a mechanical device for holding the bow at any increment of draw, except as provided in Subsection (5) and Rule R657-12;

(d) a release aid that is not hand held or that supports the draw weight of the bow, except as provided in Subsection (5) and Rule R657-12; or

(e) a bow with an attached electronic range finding device or a magnifying aiming device.

(3) Arrows carried in or on a vehicle where a person is riding must be in an arrow quiver or a closed case.

(4)(a) A person who has obtained an archery permit for a big game hunt may:

(i) use only archery equipment authorized in Subsections (1) and (2) to take the species authorized in the permit; and

(ii) not possess or be in control of a crossbow, draw-lock, rifle, shotgun or muzzleloader while in the field during an archery hunt.

(A) "Field" for purposes of this section, means a location where the permitted species of wildlife is likely to be found. "Field" does not include a hunter's established campsite or the interior of a fully enclosed automobile or truck.

(b) The provisions of Subsection (a) do not apply to:

(i) a person licensed to hunt upland game or waterfowl provided the person complies with Rules R657-6 and R657-9 and the Upland Game Guidebook and Waterfowl Guidebook, respectively, and possessing only the weapons authorized to take upland game or waterfowl;

(ii) a person licensed to hunt big game species during hunts that coincide with the archery hunt, provided the person is in compliance with the regulations of that hunt and possesses only the weapons authorized for that hunt;

(iii) livestock owners protecting their livestock;

(iv) 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 protected wildlife; or

(v) a person possessing a crossbow or draw-lock under a certificate of registration issued pursuant to R657-12.

(5) A person who has obtained an any weapon permit for a big game hunt may use archery equipment authorized in this Section to take the species authorized in the permit, including a crossbow or draw-lock.

(6)(a) A crossbow used to hunt big game must have:

(i) a minimum draw weight of 125 pounds;

(ii) a minimum draw length of 14 inches, measured between the latch (nocking point) and where the bow limbs

attach to the stock;

(iii) an overall length of at least 24 inches; measured between the butt stock end and where the bow limbs attach to the stock; and

(iv) a positive mechanical safety mechanism.

(b) A crossbow arrow or bolt used to hunt big game must be at least 16 inches long and have:

(i) fixed broadheads that are at least 7/8 inch wide at the widest point; or

(ii) expandable, mechanical broadheads that are at least 7/8 inch wide at the widest point when the broadhead is in the open position.

(c) It is unlawful for any person to:

(i) hunt big game with a crossbow during a big game archery hunt, except as provided in R657-12-8;

(ii) carry a cocked crossbow containing an arrow or a bolt while in or on any motorized vehicle on a public highway or other public right-of-way, except as provided in R657-12-4; or

(iii) hunt any protected wildlife with a crossbow:

(A) bolt that has any chemical, explosive or electronic device attached;

(B) that has an attached electronic range finding device;

or

(C) that has an attached magnifying aiming device, except as provided in Subsection (7).

(7) A crossbow used to hunt big game during an any weapon hunt may have a fixed or variable magnifying scope.

R657-5-12. Areas With Special Restrictions.

(1)(a) Hunting of any wildlife is prohibited within the boundaries of all park areas, except those designated by the Division of Parks and Recreation in Rule R651-614-4.

(b) Hunting with rifles and handguns in park areas designated open is prohibited within one mile of all park area facilities, including buildings, camp or picnic sites, overlooks, golf courses, boat ramps, and developed beaches.

(c) Hunting with shotguns or archery equipment is prohibited within one-quarter mile of the areas provided in Subsection (b).

(2) Hunting is closed within the boundaries of all national parks unless otherwise provided by the governing agency.

(3) Hunters obtaining a Utah license, permit or tag to take big game are not authorized to hunt on tribal trust lands. Hunters must obtain tribal authorization to hunt on tribal trust lands.

(4) Military installations, including Camp Williams, are closed to hunting and trespassing unless otherwise authorized.

(5) In Salt Lake County, a person may not hunt big game within one-half mile of Silver Lake in Big Cottonwood Canyon.

(6) Hunting is closed within a designated portion of the town of Alta. Hunters may refer to the town of Alta for boundaries and other information.

(7) Domesticated Elk Facilities and Domesticated Elk Hunting Parks, as defined in Section 4-39-102(2) and Rules R58-18 and R58-20, are closed to big game hunting. This restriction does not apply to the lawful harvest of domesticated elk as defined and allowed pursuant to Rule R58-20.

(8) State waterfowl management areas are closed to taking big game, except as otherwise provided in the guidebook of the Wildlife Board for taking big game.

(9) Hunters are restricted to using archery equipment, muzzleloaders or shotguns on the Scott M. Matheson Wetland Preserve.

(10) A person may not discharge a firearm, except a shotgun or muzzleloader, from, upon, or across the Green

River located near Jensen, Utah from the Highway 40 bridge upstream to the Dinosaur National Monument boundary.

R657-5-13. 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:

(i) take protected wildlife; or

(ii) locate protected wildlife while in possession of a rifle, shotgun, archery equipment, crossbow, or muzzleloader.

(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 headlights 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.

R657-5-14. Use of Vehicle or Aircraft.

(1)(a) A person may not use an airplane, drone, or any other airborne vehicle or device, or any motorized terrestrial or aquatic vehicle, including snowmobiles and other recreational vehicles, except a vessel as provided in Subsection (c), to take protected wildlife.

(b) A person may not take protected wildlife being chased, harmed, harassed, rallied, herded, flushed, pursued or moved by any vehicle, device, or conveyance listed in Subsection (a).

(c) Big game may be taken from a vessel provided:

(i) the motor of a motorboat has been completely shut off;

(ii) the sails of a sailboat have been furled; and

(iii) the vessel's progress caused by the motor or sail has ceased.

(2)(a) A person may not use any type of aircraft, drone, or other airborne vehicle or device from 48 hours before any big game hunt begins through 48 hours after any big game hunting season ends to:

(i) transport a hunter or hunting equipment into a hunting area;

(ii) transport a big game carcass; or

(iii) locate, or attempt to observe or locate any protected wildlife.

(b) Flying slowly at low altitudes, hovering, circling or repeatedly flying over a forest, marsh, field, woodland or rangeland where protected wildlife is likely to be found may be used as evidence of violations of Subsections (1) and (2).

(3) The provisions of this section do not apply to the operation of an aircraft, drone, or other airborne vehicle or device in a usual manner, or landings and departures from improved airstrips, where there is no attempt or intent to locate protected wildlife.

R657-5-15. Party Hunting and Use of Dogs.

(1) A person may not take big game for another person, except as provided in Section 23-19-1 and Rule R657-12.

(2) A person may not use the aid of a dog to take, chase, harm or harass big game. The use of one blood-trailing dog controlled by leash during lawful hunting hours within 72 hours of shooting a big game animal is allowed to track wounded animals and aid in recovery.

R657-5-16. Big Game Contests.

A person may not enter or hold a big game contest that:

- (1) is based on big game or its parts; and
- (2) offers cash or prizes totaling more than \$500.

R657-5-17. Tagging.

- (1) The carcass of any species of big game must be tagged in accordance with Section 23-20-30.
- (2) A person may not hunt or pursue big game after any of the notches have been removed from the tag or the tag has been detached from the permit.
- (3) The tag must remain with the largest portion of the meat until the animal is entirely consumed.

R657-5-18. Transporting Big Game Within Utah.

- (1) A person may transport big game within Utah only as follows:
 - (a) the head or sex organs must remain attached to the largest portion of the carcass;
 - (b) the antlers attached to the skull plate must be transported with the carcass of an elk taken in a spike bull unit; and
 - (c) the person who harvested the big game animal must accompany the carcass and must possess a valid permit corresponding to the tag attached to the carcass, except as provided in Subsection (2).
- (2) A person who did not take the big game animal may transport it only after obtaining a shipping permit or disposal receipt from the division or a donation slip as provided in Section 23-20-9.

R657-5-19. Exporting Big Game From Utah.

- (1) A person may export big game or its parts from Utah only if:
 - (a) the person who harvested the big game animal accompanies it and possesses a valid permit corresponding to the tag which must be attached to the largest portion of the carcass; or
 - (b) the person exporting the big game animal or its parts, if it is not the person who harvested the animal, has obtained a shipping permit from the division.

R657-5-20. Purchasing or Selling Big Game or Its Parts.

- (1) A person may only purchase, sell, offer or possess for sale, barter, exchange or trade any big game or its parts as follows:
 - (a) Antlers, heads and horns of legally taken big game may be purchased or sold only on the dates published in the guidebook of the Wildlife Board for taking big game;
 - (b) Untanned hides of legally taken big game may be purchased or sold only on the dates published in the guidebook of the Wildlife Board for taking big game;
 - (c) Inedible byproducts, excluding hides, antlers and horns of legally possessed big game as provided in Subsection 23-20-3, may be purchased or sold at any time;
 - (d) tanned hides of legally taken big game may be purchased or sold at any time; and
 - (e) shed antlers and horns may be purchased or sold at any time.
- (2)(a) Protected wildlife that is obtained by the division by any means may be sold or donated at any time by the division or its agent.
- (b) A person may purchase or receive protected wildlife from the division, which is sold or donated in accordance with Subsection (2)(a), at any time.
- (3) A person selling or purchasing antlers, heads, horns or untanned hides shall keep transaction records stating:
 - (a) the name and address of the person who harvested the animal;
 - (b) the transaction date; and
 - (c) the permit number of the person who harvested the

animal.

- (4) Subsection (3) does not apply to scouting programs or other charitable organizations using untanned hides.

R657-5-21. Possession of Antlers and Horns.

- (1) A person may possess antlers or horns or parts of antlers or horns only from:
 - (a) lawfully harvested big game;
 - (b) antlers or horns lawfully obtained as provided in Section R657-5-20; or
 - (c) shed antlers or shed horns.
- (2)(a) A person may gather shed antlers or shed horns or parts of shed antlers or shed horns at any time. An authorization is required to gather shed antlers or shed horns or parts of shed antlers or shed horns during the shed antler and shed horn season published in the guidebook of the Wildlife Board for taking big game.
- (b) A person must complete a wildlife harassment and habitat destruction prevention course annually to obtain the required authorization to gather shed antlers during the antler gathering season.
- (3) "Shed antler" means an antler which:
 - (a) has been dropped naturally from a big game animal as part of its annual life cycle; and
 - (b) has a rounded base commonly known as the antler button or burr attached which signifies a natural life cycle process.
- (4) "Shed horn" means the sheath from the horn of a pronghorn that has been dropped naturally as part of its annual life cycle. No other big game species shed their horns naturally.

R657-5-22. Poaching-Reported Reward Permits.

- (1) For purposes of this section, "successful prosecution" means the screening, filing of charges and subsequent adjudication of guilt for the poaching incident.
- (2) Any person who provides information leading to another person's successful prosecution under Section 23-20-4 for wanton destruction of a bull moose, desert bighorn ram, rocky mountain bighorn ram, rocky mountain goat, bison, bull elk, buck deer or buck pronghorn within any once-in-a-lifetime or limited entry area may receive a permit from the division to hunt the same species on the same once-in-a-lifetime or limited entry area where the violation occurred, except as provided in Subsection (3).
- (3)(a) In the event that issuance of a poaching-reported reward permit would exceed 5% of the total number of limited entry or once-in-a-lifetime 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 Subsections (b) or (c).
- (b) If the illegally taken animal is a bull moose, desert bighorn ram, rocky mountain bighorn ram, rocky mountain goat or bison, a permit for an alternative species and an alternative once-in-a-lifetime or limited entry area that has been allocated more than 20 permits may be issued.
- (c) If the illegally taken animal is a bull elk, buck deer or buck pronghorn, a permit for the same species on an alternative limited entry area that has been allocated more than 20 permits may be issued.
- (4)(a) The division may issue only one poaching-reported reward permit for any one animal 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 per species shall be issued to any one person in any one calendar year.
- (5)(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.

(6) Any person who receives a poaching-reported reward permit must possess or obtain a Utah hunting or combination license and otherwise be eligible to hunt and obtain big game permits as provided in all rules and regulations of the Wildlife Board and the Wildlife Resources Code.

R657-5-23. General Archery Buck Deer Hunt.

(1) The dates of the general archery buck deer hunt are provided in the guidebook of the Wildlife Board for taking big game.

(2) A person who has obtained a general archery buck deer permit, or any other permit which allows that person to hunt general archery buck deer may use archery equipment prescribed in R657-5-11 to take:

(a) one buck deer within the general hunt area specified on the permit for the time specified in the guidebook of the Wildlife Board for taking big game; or

(b) a deer of hunter's choice within extended archery areas as provided in the guidebook of the Wildlife Board for taking big game.

(c) A person who has obtained a general archery buck deer permit, or any other permit which allows that person to hunt general archery buck deer, may not hunt within Cooperative Wildlife Management unit deer areas.

(d) A person who has obtained a general archery buck deer permit, or any other permit which allows that person to hunt general archery buck deer, may not hunt within premium limited entry deer or limited entry deer areas, except as provided by the Wildlife Board in the guidebooks for big game.

(3)(a) A person who obtains a general archery buck deer permit, or any other permit which allows that person to hunt general archery buck deer, may hunt within extended archery areas during the extended archery area seasons as provided in the guidebook of the Wildlife Board for taking big game and as provided in Subsection (b).

(b)(i) A person must complete the Archery Ethics Course annually to hunt any extended archery areas during the extended archery season.

(ii) A person must possess an Archery Ethics Course Certificate of Completion while hunting.

(4) A person who has obtained a general archery buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except antlerless deer and extended archery areas.

(5) If a person 17 years of age or younger obtains a general archery buck deer permit, that person may only hunt during the general archery deer season and the extended archery season as provided Section R657-5-23(3).

(6) Hunter orange material must be worn if a centerfire rifle hunt is also in progress in the same area as provided in Section 23-20-31. Archers are cautioned to study rifle hunt tables and identify these areas described in the guidebook of the Wildlife Board for taking big game.

R657-5-24. General Any Weapon Buck Deer Hunt.

(1) The dates for the general any weapon buck deer hunt are provided in the guidebook of the Wildlife Board for taking big game.

(2)(a) A person who has obtained a general any weapon buck permit may use any legal weapon to take one buck deer within the hunt area specified on the permit as published in the guidebook of the Wildlife Board for taking big game.

(b) A person who has obtained a general any weapon buck deer permit, or any other permit which allows that person to hunt general any weapon buck deer, may not hunt within Cooperative Wildlife Management unit deer areas.

(c) A person who has obtained a general any weapon buck deer permit, or any other permit which allows that person to hunt general any weapon buck deer, may not hunt within premium limited entry deer and limited entry deer areas, except as provided by the Wildlife Board in the guidebooks for big game.

(3) A person who has obtained a general any weapon buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except:

(a) antlerless deer, as provided in R657-5-27; and

(b) any person 17 years of age or younger on July 31 of the current year, may hunt the general archery, extended archery, general any weapon and general muzzleloader buck deer seasons applicable to the unit specified on the general any weapon buck deer permit, using the appropriate equipment as provided in Sections R657-5-7 through R657-5-11, respectively.

R657-5-25. General Muzzleloader Buck Deer Hunt.

(1) The dates for the general muzzleloader buck deer hunt are provided in the guidebook of the Wildlife Board for taking big game.

(2)(a) A person who has obtained a general muzzleloader buck permit may use a muzzleloader, as prescribed in R657-5-10, to take one buck deer within the general hunt area specified on the permit as published in the guidebook of the Wildlife Board for taking big game.

(b) A person who has obtained a general muzzleloader buck deer permit, or any other permit which allows that person to hunt general muzzleloader buck deer, may not hunt within any deer Cooperative Wildlife Management unit.

(c) A person who has obtained a general muzzleloader buck deer permit, or any other permit which allows that person to hunt general muzzleloader buck deer, may not hunt within premium limited entry deer or limited entry deer areas, except as provided by the Wildlife Board in the guidebooks for big game.

(3)(a) A person who has obtained a general muzzleloader buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except antlerless deer, as provided in R657-5-27.

(b) If a person 17 years of age or younger purchases a general muzzleloader buck deer permit, that person may only hunt during the general muzzleloader deer season.

(4) Hunter orange material must be worn if a centerfire rifle hunt is also in progress in the same area as provided in Section 23-20-31. Muzzleloader hunters are cautioned to study the rifle hunt tables to identify these areas described in the guidebooks of the Wildlife Board for taking big game.

R657-5-26. Premium Limited Entry and Limited Entry Buck Deer Hunts.

(1)(a) To hunt in a premium limited entry or limited entry buck deer area, hunters must obtain the respective limited entry buck permit. Limited entry areas are not open to general archery buck deer, general any weapon buck deer, or general muzzleloader buck deer hunting, except as specified in the guidebook of the Wildlife Board for taking big game.

(b)(i) The Wildlife Board may establish in guidebook a limited entry buck deer hunt on a general season buck deer unit.

(ii) The season dates for a limited entry hunt under this Subsection will not overlap the season dates for the underlying general season hunt on the unit.

(iii) A landowner association under R657-43 is not eligible to receive limited entry permits that occur on general season units.

(2) A limited entry buck deer permit allows a person using the prescribed legal weapon, to take one buck deer within the area and season specified on the permit, excluding deer cooperative wildlife management units located within the limited entry unit.

(3)(a) A person who has obtained a premium limited entry, limited entry, management, or cooperative wildlife management unit buck deer permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a buck deer.

(b) Limited entry and cooperative wildlife management unit buck deer permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, management, or cooperative wildlife management unit permit or bonus point in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(3).

(4) A person who has obtained a premium limited entry or limited entry buck permit may not:

(a) obtain any other deer permit, except an antlerless deer permit as provided in R657-5-27 and the guidebooks of the Wildlife Board; or

(b) hunt during any other deer hunt, except unsuccessful archery hunters may hunt within extended archery areas as provided in Subsection (7).

(5)(a) The Wildlife Board may establish a multi-season hunting opportunity in the big game guidebooks for selected premium limited entry and limited entry buck deer hunts.

(b) A person that obtains a premium limited entry or limited entry buck deer permit with a multi-season opportunity may hunt during any of the following limited entry buck deer seasons established in the guidebooks of the Wildlife Board for the unit specified on the premium limited entry or limited entry buck deer permit:

(i) archery season, using only archery equipment prescribed in R657-5-11 for taking deer;

(ii) muzzleloader season, using only muzzleloader equipment prescribed in R657-5-10 for taking deer; and

(iii) any weapon season, using any legal weapon prescribed in R657-5 for taking deer.

(c) A landowner association under R657-43 is not eligible to receive a multi-season hunting opportunity for premium limited entry or limited entry units.

(6) A premium limited entry or limited entry buck deer permit, including a permit with a multi-season opportunity, is valid only within the boundaries of the unit designated on the permit, excluding:

(a) areas closed to hunting;

(b) deer cooperative wildlife management units; and

(c) Indian tribal trust lands.

(7) A person who possesses an archery buck deer permit for a premium limited entry or limited entry unit, including a permit with a multi-season opportunity, may hunt buck deer within any extended archery area during the established extended archery season for that area, provided the person:

(a) did not take a buck deer during the premium limited entry or limited entry hunt;

(b) uses the prescribed archery equipment for the extended archery area;

(c) completes the annual Archery Ethics Course required to hunt extended archery areas during the extended archery season; and

(d) possesses on their person while hunting:

(i) the multi-season limited entry or limited entry buck deer permit; and

(ii) the Archery Ethics Course Certificate of Completion.

R657-5-27. Antlerless Deer Hunts.

(1) To hunt an antlerless deer, a hunter must obtain an antlerless deer permit.

(2)(a) An antlerless deer permit allows a person to take one antlerless deer, per antlerless deer tag, using any legal weapon within the area and season as specified on the permit and in the antlerless addendum.

(b) A person may not hunt on any cooperative wildlife management units unless that person obtains an antlerless deer permit for a cooperative wildlife management unit as specified on the permit.

(3) A person who has obtained an antlerless deer permit may not hunt during any other antlerless deer hunt or obtain any other antlerless deer permit.

(4)(a) A person who obtains an antlerless deer permit and any of the permits listed in Subsection (b) may use the antlerless deer permit during the established season for the antlerless deer permit and during the established season for the permits listed in Subsection (b) provided:

(i) the permits are both valid for the same area;

(ii) the appropriate archery equipment is used if hunting with an archery permit; and

(iii) the appropriate muzzleloader hunt equipment is used if hunting with a muzzleloader permit.

(b)(i) General archery deer;

(ii) general muzzleloader deer;

(iii) limited entry archery deer; or

(iv) limited entry muzzleloader deer.

R657-5-28. General Archery Elk Hunt.

(1) The dates of the general archery elk hunt are provided in the guidebooks of the Wildlife Board for taking big game.

(2)(a) A person who has obtained a general archery elk permit may use archery equipment to take:

(i) an antlerless elk or a bull elk on a general any bull elk unit, excluding elk cooperative wildlife management units;

(ii) an antlerless elk or a spike bull elk on a general spike bull elk unit, excluding elk cooperative wildlife management units;

(iii) an antlerless elk or a bull elk on extended archery areas as provided in the guidebook of the Wildlife Board for taking big game.

(3)(a) A person who obtains a general archery elk permit may hunt within the extended archery areas during the extended archery area seasons as provided in the guidebook of the Wildlife Board for taking big game and as provided in Subsection (b).

(b)(i) A person must complete the Archery Ethics Course annually to hunt the extended archery areas during the extended archery season.

(ii) A person must possess an Archery Ethics Course Certificate of Completion on their person while hunting.

(4) A person who has obtained an archery elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Subsection R657-5-33(3) and by the guidebooks of the Wildlife Board for taking big game.

(5) Hunter orange material must be worn if a centerfire

rifle hunt is also in progress in the same area as provided in Section 23-20-31. Archers are cautioned to study the rifle hunt tables to identify these areas described in the guidebook of the Wildlife Board for taking big game.

R657-5-29. General Season Bull Elk Hunt.

(1) The dates and areas for the general season bull elk hunts are provided in the guidebooks of the Wildlife Board for taking big game, except the following areas are closed to general any weapon bull elk hunting:

- (a) Salt Lake County south of I-80 and east of I-15; and
- (b) elk cooperative wildlife management units.

(2)(a) A person may purchase either a spike bull elk permit or an any bull elk permit.

(b) A person who has obtained a general season spike bull elk permit may take a spike bull elk on a general season spike bull elk unit. Any bull elk units are closed to spike bull elk permittees.

(c) A person who has obtained a general season any bull elk permit may take any bull elk, including a spike bull elk, on a general season any bull elk unit. Spike bull elk units are closed to any bull elk permittees.

(3) A person who has obtained a general season bull elk permit may use any legal weapon to take a spike bull elk or any bull elk, as specified on the permit.

(4) A person who has obtained a general season bull elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Subsection R657-5-33(3).

R657-5-30. General Muzzleloader Bull Elk Hunt.

(1) The dates and areas for general muzzleloader bull elk hunts are provided in the guidebooks of the Wildlife Board for taking big game, except the following areas are closed to general muzzleloader bull elk hunting:

- (a) Salt Lake County south of I-80 and east of I-15; and
- (b) elk cooperative wildlife management units.

(2)(a) General muzzleloader bull elk hunters may purchase either a spike bull elk permit or an any bull elk permit.

(b) A person who has obtained a general muzzleloader spike bull elk permit may use a muzzleloader, prescribed in R657-5-10, to take a spike bull elk on an any general spike bull elk unit. Any bull units are closed to spike bull muzzleloader permittees.

(c) A person who has obtained a general muzzleloader any bull elk permit may use a muzzleloader, as prescribed in R657-5-10, to take any bull elk on an any bull elk unit. Spike bull units are closed to any bull muzzleloader permittees.

(3) A person who has obtained a general muzzleloader bull elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Subsection R657-5-33(3).

R657-5-31. Youth General Any Bull Elk Hunt.

(1)(a) For purposes of this section "youth" means any person 17 years of age or younger on July 31 of the current year.

(b) A youth may apply for or obtain a youth any bull elk permit.

(c) A qualified person may obtain a youth any bull elk permit only once during their life.

(2) The youth any bull elk hunting season and areas are published in the guidebook of the Wildlife Board for taking big game.

(3)(a) A youth who has obtained a youth general any bull elk permit may take any bull elk, including antlerless elk, on a general any bull elk unit. Spike bull elk units are closed to youth general any bull elk permittees.

(b) A youth who has obtained a youth general any bull elk permit may use any legal weapon to take any bull elk or antlerless elk as specified on the permit.

(4) A youth who has obtained a youth general any bull elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Section R657-5-33(3).

(5) Preference points shall not be awarded or utilized when applying for or obtaining a youth general any bull elk permit.

R657-5-32. Limited Entry Bull Elk Hunts.

(1) To hunt in a limited entry bull elk area, a hunter must obtain a limited entry bull elk permit for the area.

(2)(a) A limited entry bull elk permit allows a person, using the prescribed legal weapon, to take one bull elk within the area and season specified on the permit, except as provided in Subsection (5) and excluding elk cooperative wildlife management units located within a limited entry unit. Spike bull elk restrictions do not apply to limited entry elk permittees.

(3)(a) The Wildlife Board may establish a multi-season hunting opportunity in the big game guidebooks for selected limited entry bull elk units.

(b) A person that obtains a limited entry bull elk permit with a multi-season opportunity may hunt during any of the following limited entry bull elk seasons established in the guidebooks of the Wildlife Board for the unit specified on the limited entry bull elk permit:

- (i) archery season, using only archery equipment prescribed in R657-5-11 for taking elk;
- (ii) muzzleloader season, using only muzzleloader equipment prescribed in R657-5-10 for taking elk; and
- (iii) any weapon season, using any legal weapon prescribed in R657-5 for taking elk.

(c) A landowner association under R657-43 is not eligible to receive a multi-season hunting opportunity for limited entry units.

(4) A limited entry bull elk permit, including a permit with a multi-season opportunity, is valid only within the boundaries of the unit designated on the permit, excluding:

- (a) areas closed to hunting;
- (b) elk cooperative wildlife management units; and
- (c) Indian tribal trust lands.

(5) A person who possesses any limited entry archery bull elk permit, including a permit with a multi-season opportunity, may hunt bull elk within any extended archery area during the established extended archery season for that area, provided the person:

- (a) did not take a bull elk during the limited entry hunt;
- (b) uses the prescribed archery equipment for the extended archery area;

(c) completes the annual Archery Ethics Course required to hunt extended archery areas during the extended archery season; and

(d) possesses on their person while hunting:

- (i) the limited entry bull elk permit; and
- (ii) the Archery Ethics Course Certificate of Completion.

(6) "Prescribed legal weapon" means for purposes of this subsection:

(a) archery equipment, as defined in R657-5-11, when hunting the archery season, excluding a crossbow or draw-lock;

(b) muzzleloader equipment, as defined in R657-5-10, when hunting the muzzleloader season, excluding magnifying scopes; and

(c) any legal weapon, including a muzzleloader and crossbow with a fixed or variable magnifying scope or draw-

lock when hunting during the any weapon season.

(7)(a) A person who has obtained a limited entry or cooperative wildlife management unit bull elk permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a bull elk.

(b) Limited entry and cooperative wildlife management unit bull elk permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, or cooperative wildlife management unit permit or bonus point in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(2).

(8) A person who has obtained a limited entry bull elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Subsections (5) and R657-5-33(3).

R657-5-33. Antlerless Elk Hunts.

(1) To hunt an antlerless elk, a hunter must obtain an antlerless elk permit.

(2)(a) An antlerless elk permit allows a person to take one antlerless elk using any legal weapon within the area and season as specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(b) A person may not hunt on any cooperative wildlife management units unless that person obtains an antlerless elk permit for a cooperative wildlife management unit as specified on the permit.

(3)(a) A person may obtain two elk permits each year, provided one or both of the elk permits is an antlerless elk permit.

(b) For the purposes of obtaining two elk permits, a hunter's choice elk permit may not be considered an antlerless elk permit.

(4)(a) A person who obtains an antlerless elk permit and any of the permits listed in Subsection (b) may use the antlerless elk permit during the established season for the antlerless elk permit and during the established season for the permits listed in Subsection (b) provided:

- (i) the permits are both valid for the same area;
- (ii) the appropriate archery equipment is used if hunting with an archery permit; and
- (iii) the appropriate muzzleloader hunt equipment is used if hunting with a muzzleloader permit.

(b)(i) General buck deer for archery, muzzleloader or any legal weapon;

(ii) general bull elk for archery, muzzleloader or any legal weapon;

(iii) limited entry buck deer for archery, muzzleloader or any legal weapon;

(iv) Limited entry bull elk for archery, muzzleloader or any legal weapon; or

(v) antlerless elk.

R657-5-34. Buck Pronghorn Hunts.

(1) To hunt buck pronghorn, a hunter must obtain a buck pronghorn permit.

(2) A person who has obtained a buck pronghorn permit may not obtain any other pronghorn permit or hunt during any other pronghorn hunt.

(3)(a) A person who has obtained a limited entry or cooperative wildlife management unit buck pronghorn permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a buck pronghorn.

(b) Limited entry and cooperative wildlife management unit buck pronghorn permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, or cooperative wildlife management unit permit or bonus point in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(2).

(4) A buck pronghorn permit allows a person to take one buck pronghorn within the area, during the season, and using the weapon type specified on the permit, except on a pronghorn cooperative wildlife management unit located within a limited entry unit.

R657-5-35. Doe Pronghorn Hunts.

(1) To hunt a doe pronghorn, a hunter must obtain a doe pronghorn permit.

(2)(a) A doe pronghorn permit allows a person to take one doe pronghorn, per doe pronghorn tag, using any legal weapon within the area and season as specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(b) A person may not hunt on any cooperative wildlife management units unless that person obtains an antlerless pronghorn permit for a cooperative wildlife management unit as specified on the permit.

(3) A person who has obtained a doe pronghorn permit may not hunt during any other pronghorn hunt or obtain any other pronghorn permit.

R657-5-36. Antlerless Moose Hunts.

(1) To hunt an antlerless moose, a hunter must obtain an antlerless moose permit.

(2)(a) An antlerless moose permit allows a person to take one antlerless moose using any legal weapon within the area and season as specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(b) A person may not hunt on any cooperative wildlife management unit unless that person obtains an antlerless moose cooperative wildlife management unit as specified on the permit.

(3) A person who has obtained an antlerless moose permit may not hunt during any other moose hunt or obtain any other moose permit.

R657-5-37. Bull Moose Hunts.

(1) To hunt bull moose, a hunter must obtain a bull moose permit.

(2) A person who has obtained a bull moose permit may not obtain any other moose permit or hunt during any other moose hunt.

(3) A bull moose permit allows a person using any legal weapon to take one bull moose within the area and season specified on the permit, excluding any moose cooperative wildlife management unit located within a limited entry unit.

(4)(a) A person who has obtained a bull moose permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a bull moose.

(b) Bull moose permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, or

cooperative wildlife management unit permit or bonus point in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(2).

R657-5-38. Bison Hunts.

(1) To hunt bison, a hunter must obtain a bison permit.

(2) A person who has obtained a bison permit may not obtain any other bison permit or hunt during any other bison hunt.

(3) The bison permit allows a person using any legal weapon to take a bison of either sex within the area and season as specified on the permit.

(4)(a) An orientation course is required for bison hunters who draw an Antelope Island bison permit. Hunters shall be notified of the orientation date, time and location.

(b) The Antelope Island hunt is administered by the Division of Parks and Recreation.

(5) A cow bison permit allows a person to take one cow bison using any legal weapon within the area and season specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(6) An orientation course is required for bison hunters who draw cow bison permits. Hunters will be notified of the orientation date, time and location.

(7)(a) A person who has obtained a bison permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a bison.

(b) Bison permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, or cooperative wildlife management unit permit or bonus point in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(2).

R657-5-39. Desert Bighorn and Rocky Mountain Bighorn Sheep Hunts.

(1) To hunt desert bighorn sheep or Rocky Mountain bighorn sheep, a hunter must obtain the respective permit.

(2) A person who has obtained a desert bighorn sheep or Rocky Mountain bighorn sheep permit may not obtain any other desert bighorn sheep or Rocky Mountain bighorn sheep permit or hunt during any other desert bighorn sheep or Rocky Mountain bighorn sheep hunt.

(3) Desert bighorn sheep and Rocky Mountain bighorn sheep permits are considered separate once-in-a-lifetime hunting opportunities.

(4)(a) The desert bighorn sheep permit allows a person using any legal weapon to take one desert bighorn ram within the area and season specified on the permit.

(b) The Rocky Mountain sheep permit allows a person using any legal weapon to take one Rocky Mountain bighorn ram within the area and season specified on the permit.

(5) The permittee may attend a hunter orientation course. The division provides each permittee with the time and location of the course.

(6) All bighorn sheep hunters are encouraged to have a spotting scope with a minimum of 15 power while hunting bighorn sheep. Any ram may be legally taken, however, permittees are encouraged to take a mature ram. The terrain inhabited by bighorn sheep is extremely rugged, making this hunt extremely strenuous.

(7) Successful hunters must deliver the horns of the bighorn sheep to a division office within 72 hours of leaving the hunting area. A numbered seal will be permanently

affixed to the horn indicating legal harvest.

(8)(a) A person who has obtained a desert bighorn sheep or Rocky Mountain bighorn sheep permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a desert bighorn sheep or Rocky Mountain bighorn sheep.

(b) Desert bighorn sheep or Rocky Mountain bighorn sheep permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, or cooperative wildlife management unit permit or bonus point in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(2).

R657-5-40. Rocky Mountain Goat Hunts.

(1) To hunt Rocky Mountain goat, a hunter must obtain a Rocky Mountain goat permit.

(2) A person who has obtained a Rocky Mountain goat permit may not obtain any other Rocky Mountain goat permit or hunt during any other Rocky Mountain goat hunt.

(3) A Rocky Mountain goat of either sex may be legally taken on a hunter's choice permit. Permittees are encouraged to take a mature goat. A mature goat is a goat older than two years of age, as determined by counting the annual rings on the horn.

(4) The goat permit allows a person using any legal weapon to take one goat within the area and season specified on the permit.

(5) All goat hunters are encouraged to have a spotting scope with a minimum of 15 power while hunting goats. The terrain inhabited by Rocky Mountain goat is extremely rugged making this hunt extremely strenuous. The goat's pelage may be higher quality later in the hunting season.

(6) A female-goat only permit allows a person to take one female-goat using any legal weapon within the area and season specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(7) An orientation course is required for Rocky Mountain goat hunters who draw female-goat only permits. Hunters will be notified of the orientation date, time and location.

(8)(a) A person who has obtained a Rocky Mountain goat permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a Rocky Mountain goat.

(b) Rocky Mountain goat permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, or cooperative wildlife management unit permit or bonus points in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(2).

R657-5-41. Depredation Hunter Pool Permits.

(1) When big game are causing damage or are considered a nuisance, control hunts not listed in the guidebook of the Wildlife Board for taking big game may be held as provided in Rule R657-44. These hunts occur on short notice, involve small areas, and are limited to only a few hunters.

(2) For the purpose of this section, nuisance is defined

as a situation where big game animals are found to have moved off formally approved management units onto adjacent units or other areas not approved for that species.

R657-5-42. Carcass Importation.

(1) It is unlawful to import dead elk, moose, mule deer, or white-tailed deer or their parts from the areas of any state, province, game management unit, equivalent wildlife management unit, or county, which has deer or elk diagnosed with Chronic Wasting Disease, except the following portions of the carcass:

- (a) meat that is cut and wrapped either commercially or privately;
- (b) quarters or other portion of meat with no part of the spinal column or head attached;
- (c) meat that is boned out;
- (d) hides with no heads attached;
- (e) skull plates with antlers attached that have been cleaned of all meat and tissue;
- (f) antlers with no meat or tissue attached;
- (g) upper canine teeth, also known as buglers, whistlers, or ivories; or
- (h) finished taxidermy heads.

(2)(a) The affected states, provinces, game management units, equivalent wildlife management units, or counties, which have deer, elk, or moose diagnosed with Chronic Wasting Disease shall be available at division offices and through the division's Internet address.

(b) Importation of harvested elk, moose, mule deer, or white-tailed deer or its parts from the affected areas are hereby restricted pursuant to Subsection (1).

(3) Nonresidents of Utah transporting harvested elk, moose, mule deer, or white-tailed deer from the affected areas are exempt if they:

- (a) do not leave any part of the harvested animal in Utah and do not stay more than 24 hours in the state of Utah;
- (b) do not have their deer, elk, or moose processed in Utah; or
- (c) do not leave any parts of the carcass in Utah.

R657-5-43. Chronic Wasting Disease - Infected Animals.

(1) Any person who under the authority of a permit issued by the division legally takes a deer, elk, or moose that is later confirmed to be infected with Chronic Wasting Disease may:

- (a) retain the entire carcass of the animal;
- (b) retain any parts of the carcass, including antlers, and surrender the remainder to the division for proper disposal; or
- (c) surrender all portions of the carcass in their actual or constructive possession, including antlers, to the division and receive a free new permit the following year for the same hunt.

(2) The new permit issued pursuant to Subsection (1)(c) shall be for the same species, sex, weapon type, unit, region, and otherwise subject to all the restrictions and conditions imposed on the original permit, except season dates for the permit shall follow the guidebook of the Wildlife Board for taking big game published in the year the new permit is valid.

(3) Notwithstanding other rules to the contrary, private landowners and landowner associations may refuse access to private property to persons possessing new permits issued under Subsection (1)(c).

R657-5-44. Management Bull Elk Hunt.

(1)(a) For the purposes of this section "management bull" means any bull elk with 5 points or less on at least one antler. A point means a projection longer than one inch, measured from its base to its tip.

(b) For purposes of this section "youth" means any

person 17 years of age or younger on July 31.

(c) For the purposes of this section "senior" means any person 65 years of age or older on the opening day of the management bull elk archery season published in the guidebook of the Wildlife Board for taking big game.

(2)(a) Management bull elk permits shall be distributed pursuant to R657-62 with thirty percent of the permits being allocated to youth, thirty percent to seniors and the remaining forty percent to hunters of all ages.

(3) Management bull elk permit holders may take one management bull elk during the season, on the area and with the weapon type specified on the permit. Management bull elk hunting seasons, areas and weapon types are published in the guidebook of the Wildlife Board for taking big game.

(4)(a) A person who has obtained a management bull elk permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a management bull elk.

(b) Management bull elk permit holders must report hunt information by telephone, or through the division's Internet address.

(5)(a) Management bull elk permit holders who successfully harvest a management bull elk, as defined in Subsection (1)(a) must have their animal inspected by the division.

(b) Successful hunters must deliver the head and antlers of the elk they harvest to a division office for inspection within 48 hours after the date of kill.

(6) Management bull elk permit holders may not retain possession of any harvested bull elk that fails to satisfy the definition requirements in Subsection (1)(a).

(7) A person who has obtained a management bull elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Section R657-5-33(3).

R657-5-45. General Any Weapon Buck Deer and Bull Elk Combination Hunt.

(1) Permit numbers, season dates and unit boundary descriptions for the general any weapon buck deer and bull elk combination hunt shall be established in the guidebook of the Wildlife Board for taking big game.

(2) A person who obtains a general any weapon buck deer and bull elk combination permit may use any legal weapon to take one buck deer and one bull elk during the season and within the unit specified on the permit.

(a) A general any weapon buck deer and bull elk combination permit does not authorize the holder to hunt deer or elk within any cooperative wildlife management unit.

(3) A person who has obtained a general any weapon buck deer and bull elk combination permit may not hunt during any other deer or elk hunt or obtain any other deer or elk permit, except:

(a) antlerless deer, as provided in Subsection R657-5-27, and

(b) antlerless elk, as provided in Subsection R657-5-33.

(4)(a) Lifetime license holders may obtain a general any weapon buck deer and bull elk combination permit.

(b) Upon obtaining a general any weapon buck deer and bull elk combination permit, the lifetime license holder foregoes any rights to receive a buck deer permit for the general archery, general any weapon or general muzzleloader deer hunts as provided in Section 23-19-17.5.

(c) A refund or credit is not issued for the general archery, general any weapon or general muzzleloader deer permit.

R657-5-46. Management Buck Deer Hunt.

(1)(a) For the purposes of this section "management

buck" means any buck deer with 3 points or less on at least one antler above and including the first fork in the antler. A point means a projection longer than one inch, measured from its base to its tip. The eye guard is not counted as a point.

(b) For purposes of this section "youth" means any person 17 years of age or younger on July 31.

(c) For the purposes of this section "senior" means any person 65 years of age or older on the opening day of the management buck deer archery season published in the guidebook of the Wildlife Board for taking big game.

(2) Management buck deer permits shall be distributed pursuant to rule R657-62 with thirty percent of the permits being allocated to youth, thirty percent to seniors and the remaining forty percent to hunters of all ages.

(3) Management buck deer permit holders may take one management buck deer during the season, on the area and with the weapon type specified on the permit. Management buck deer hunting seasons, areas and weapon types are published in the guidebook of the Wildlife Board for taking big game.

(4)(a) A person who has obtained a management buck deer permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a management buck deer.

(b) Management buck deer permit holders must report hunt information by telephone, or through the division's Internet address.

(5)(a) Management buck deer permit holders who successfully harvest a management buck deer, as defined in Subsection (1)(a) must have their animal inspected by the division.

(b) Successful hunters must deliver the head and antlers of the deer they harvest to a division office for inspection within 48 hours after the date of kill.

(6) Management buck deer permit holders may not retain possession of any harvested buck deer that fails to satisfy the definition requirements in Subsection (1)(a).

(7) A person who has obtained a management buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except as provided in Section R657-5-28(4).

KEY: wildlife, game laws, big game seasons

March 16, 2015

Notice of Continuation November 1, 2010

23-14-18

23-14-19

23-16-5

23-16-6

R657. Natural Resources, Wildlife Resources.**R657-15. Closure of Gunnison, Cub and Hat Islands.****R657-15-1. Purpose and Authority.**

Under authority of Section 23-21a-3, this rule provides for the management of Gunnison, Cub, and Hat islands for the protection and perpetuation of the American white pelican, *Pelicanus erythrorhynchos*, and other avian species.

R657-15-2. Closed Areas.

(1) The following areas are closed to air, water, and land trespass as a conservation measure to protect colonial bird nesting areas:

(a) Gunnison and Cub islands, located in Sections 9, 10, 15 and 16, Township 7 North, Range 9 West, Salt Lake Base and Meridian; and

(b) Hat Island, located in Section 24, Township 4 North, Range 7 West, Salt Lake Base and Meridian.

(2) This closure encompasses all of Gunnison, Cub, and Hat islands and the surrounding waters and beaches of the Great Salt Lake one mile in every direction from the 4200-foot mean sea level elevation shoreline of Gunnison, Cub, and Hat islands.

(3) The provisions of this rule do not apply to division personnel while performing their official duties, or to certified peace officers and emergency personnel acting under their direction when engaged in exigent law enforcement activities or emergency rescue operations.

KEY: wildlife, birds, conservation, wildlife management
July 5, 2005 **23-21a-3**
Notice of Continuation March 3, 2015

R657. Natural Resources, Wildlife Resources.**R657-21. Cooperative Wildlife Management Units for Small Game and Waterfowl.****R657-21-1. Purpose and Authority.**

Under authority of Section 23-23-3, this rule provides the procedures, standards, and requirements for Cooperative Wildlife Management Units for the hunting of small game and waterfowl.

R657-21-2. Definitions.

(1) Terms used in this rule are defined in Sections 23-13-2 and 23-23-2.

(2) In addition:

(a) "BLM" means Bureau of Land Management.

(b) "CWMU" means Cooperative Wildlife Management Unit.

(c) "General public" means all persons except landowner association members, landowner association operators and their spouse or dependent children.

(d) "Small game" means, for purposes of this rule only, band-tailed pigeon, cottontail rabbit, grouse, mourning dove, partridge, pheasant, ptarmigan, quail, and snowshoe hare.

R657-21-3. Operation by Landowner Association.

(1)(a) Cooperative Wildlife Management units shall be operated by a landowner or landowner association that owns land within the CWMU.

(b) Any person hunting on a CWMU must comply with all rules established by the Wildlife Board.

(2)(a) Cooperative Wildlife Management units organized for hunting small game and waterfowl shall consist of private land.

(b) The minimum acreage accepted for a CWMU is 320 contiguous acres.

(3)(a) Seventy-five percent of the enrolled land shall be open to hunting.

(b) All land open to private hunters shall be open to public hunters.

(c) All hunters shall be given an equal opportunity.

R657-21-4. Application for Certificate of Registration.

(1) Applications for a CWMU are available from division offices.

(2) In addition to the application, the landowner or landowner association must provide:

(a) a petition containing the dated signature and acreage of each participating landowner agreeing to terms of this rule;

(b) two original 1:100,000 scale BLM Surface Management Status maps showing all interior and exterior boundaries, lands enrolled and not enrolled within the exterior boundaries, and the county identification tax numbers; and

(c) all nonrefundable handling and application fees in accordance with the fee schedule.

(3) The division may return any application that is incomplete or completed incorrectly.

(4) Applications must be completed and returned to the respective division regional office, in which the CWMU is located, 60 days prior to the applicable hunting season.

(5)(a) Upon receipt of the completed application, the division may issue a certificate of registration to a landowner or landowner association to operate a CWMU.

(b) Division review of the application may require up to 45 days.

(c) If an application is rejected, the division shall provide the landowner or landowner association with written notification of the reasons for rejection within 30 days from the date of rejection.

(6) Certificates of registration are issued annually and

are effective from the date of issuance through June 30 of the following year.

R657-21-5. Renewal of a Certificate of Registration.

(1)(a) The landowner or landowner association may renew the certificate of registration for the CWMU by completing and submitting a renewal application, CWMU authorization sales report and all nonrefundable handling and application fees in accordance with the fee schedule.

(b) The renewal application must be submitted at least 60 days prior to the applicable seasons.

(2) Any changes from the previous year's certificate of registration must be indicated on the renewal application.

(3)(a) If the landowner or landowner association requests additional land to be included in the CWMU, the application must contain the dated signature of each additional landowner, the county identification tax numbers of the additional land, and two 1:100,000 scale BLM Surface Management Status maps showing the new proposed interior and exterior boundaries.

(b) If the landowner or landowner association requests land to be withdrawn from the CWMU, the application must include a copy of the previously submitted petition with the appropriate landowners' signatures deleted and two 1:100,000 scale BLM Surface Management Status maps showing the land to be withdrawn and the new proposed interior and exterior boundaries.

R657-21-6. Cooperative Wildlife Management Unit Agents.

(1) A landowner or landowner association may appoint one CWMU agent per 100 acres up to a maximum of 30 agents to monitor access and protect the private property of the CWMU.

(2) Each CWMU agent shall wear or each agent shall possess a form of identification prescribed by the Wildlife Board, which indicates that the person is a CWMU agent.

(3) A CWMU agent may refuse entry onto enrolled private land within a CWMU to any person, except the landowner, landowner association members and landowner association operators, who:

(a) does not have a CWMU authorization;

(b) endangers, or has endangered, human safety;

(c) damages, or has damaged, property within the CWMU; or

(d) fails, or has failed to, comply with reasonable guidelines and rules of the landowner or landowner association.

R657-21-7. Cooperative Wildlife Management Unit Authorizations.

(1) At least 50% of the CWMU authorizations shall be offered for sale to the general public at the times and places designated on the application for the certificate of registration.

(2) Cooperative Wildlife Management Unit Authorizations may not be sold more than 15 days before the start of the first applicable hunting season.

(3) The division shall provide, to the public, a complete list of the current year's CWMUs, wildlife to be hunted, dates, time, place and number of CWMU authorizations for public sale at least 15 days before the first applicable hunting season.

(4) A CWMU authorization entitles the holder to hunt only small game and waterfowl within the CWMU as specified on the CWMU authorization.

R657-21-8. Cooperative Wildlife Management Unit Authorization Numbers.

(1)(a) The division and landowner or landowner

association, acting jointly, shall determine the number of CWMU authorizations available for each CWMU.

(b) If the division and the landowner or landowner association disagree over the number of CWMU authorizations, the Wildlife Board may mediate and determine the number of CWMU authorizations to be issued.

(2)(a) The division and the landowner or landowner association, acting jointly, shall determine the cost of the CWMU authorizations.

(b) Cooperative Wildlife Management Unit Authorization fees should not be so prohibitively expensive that buyers resist purchase of the CWMU authorizations available for general public sale.

R657-21-9. Season Dates.

Season dates for hunting on a CWMU shall be within the general statewide season dates for each small game and waterfowl species as specified in the annual proclamations of the Wildlife Board for taking upland game and waterfowl.

R657-21-10. Bag and Possession Limits.

Bag and possession limits on a CWMU shall be the same as the bag and possession limits for each small game and waterfowl species as specified in the annual proclamations of the Wildlife Board for taking upland game and waterfowl.

R657-21-11. Rights-of-Way.

(1) Each landowner or landowner association shall:

- (a) clearly post all boundaries of the CWMU every 1,320 feet:
 - (i) including all corners, roads, trails, gates, and rights-of-way entering the unit;
 - (ii) with signs provided by the division; and
 - (iii) provide a written copy of guidelines and maps of the CWMU to each CWMU authorization holder.

(2) A landowner or landowner association may not restrict established public access to public or private land that is enclosed by the CWMU.

R657-21-12. Habitat Improvement.

(1) The Wildlife Board encourages landowners or landowner associations to improve wildlife populations by developing wildlife habitat on their lands using some of the funds received from the CWMU authorization sales.

(2)(a) The division may provide technical assistance, seed and seedlings, species specific habitat information and wildlife stock, and may cooperate in water development projects for wildlife after the landowner or landowner association has written an approved Wildlife Habitat Management Plan.

(b) The Wildlife Habitat Management Plan may be in the form of a memorandum of understanding between the landowner or landowner association and the division.

KEY: wildlife, small game, wildlife law

June 1, 2010

Notice of Continuation March 3, 2015

23-23-3

R657. Natural Resources, Wildlife Resources.**R657-33. Taking Bear.****R657-33-1. Purpose and Authority.**

(1) Under authority of Sections 23-14-18 and 23-14-19, of the Utah Code, the Wildlife Board has established this rule for taking and pursuing bear.

(2) Specific dates, areas, number of permits, limits and other administrative details which may change annually are published in the guidebook of the Wildlife Board for taking and pursuing bear.

R657-33-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "Accompany" means at a distance within which visual contact and verbal communication are maintained without the assistance of any electronic device.

(b) "Bait" means any lure containing animal, mineral or plant materials.

(c) "Baiting" means the placing, exposing, depositing, distributing or scattering of bait to lure, attract or entice bear on or over any area.

(d) "Bear" means *Ursus americanus*, commonly known as black bear.

(e) "Canned hunt" means that a bear is treed, cornered, held at bay or its ability to escape is otherwise restricted for the purpose of allowing a person who was not a member of the initial hunting party to arrive and take the bear.

(f) "Compensation" means anything of economic value in excess of \$100 that is paid, loaned, granted, given, donated, or transferred to a dog handler for or in consideration of pursuing bear for any purpose.

(g) "Control permit" means a permit issued in response to bear depredation to commercial crops pursuant to R657-33-23(4).

(h) "Cub" means a bear less than one year of age.

(i) "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.

(j) "Dog handler" means the person in the field that is responsible for transporting, releasing, tracking, controlling, managing, training, commanding and retrieving the dogs involved in the pursuit. The owner of the dogs is presumed the dog handler when the owner is in the field during pursuit.

(k) "Evidence of sex" means the teats, and sex organs of a bear, including a penis, scrotum or vulva.

(l) "Green pelt" means the untanned hide or skin of a bear.

(m) "Harvest-objective hunt" means any hunt that is identified as harvest-objective in the hunt table of the guidebook for taking bear.

(n) "Harvest-objective permit" means any permit valid on harvest-objective units.

(o) "Harvest-objective unit" means any unit designated as harvest-objective in the hunt table of the guidebook for taking bear.

(p) "Immediate family member" means a landowner's or lessee's spouse, child, son-in-law, daughter-in-law, father, mother, father-in-law, mother-in-law, brother, sister, brother-in-law, sister-in-law, stepchild, and grandchild.

(q)(i) "Limited entry hunt" means any hunt listed in the hunt table, published in the guidebook of the Wildlife Board for taking bear, which is identified as a limited entry hunt for bear.

(ii) The Wildlife Board may authorize certain limited entry hunts that span multiple seasons, identified in the guidebook for taking bear as multi-season limited entry hunts.

(iii) "Limited entry hunt" does not include harvest objective hunts or pursuit only.

(r) "Limited entry permit" means any permit obtained for a limited entry hunt, including conservation permits, expo permits, and sportsman permits.

(s) "Private lands" means any lands that are not public lands, excluding Indian trust lands.

(t) "Public lands" means any lands owned by the state, a political subdivision or independent entity of the state, or the United States, excluding Indian trust lands, that are open to the public for purposes of engaging in pursuit.

(u) "Pursue" means to chase, tree, corner or hold a bear at bay with dogs.

(v) "Restricted pursuit unit" means a bear pursuit unit where pursuit is allowed only by a dog handler who:

(i) possesses a pursuit permit issued for that particular pursuit unit;

(ii) possesses or is accompanied by a person who possesses a limited entry bear permit for the unit, and the pursuit occurs within the area and during the season established for the limited entry bear permit; or

(iii) is engaged in pursuit for compensation as provided in R657-33-26(2).

(w)(i) "Valid application" means:

(A) it is for a species for which the applicant is eligible to possess a permit;

(B) there is a hunt for that species regardless of estimated permit numbers; and

(C) there is sufficient information on the application to process the application, including personal information, hunt information, and sufficient payment.

(ii) Applications missing any of the items in Subsection (i) may still be considered valid if the application is corrected before the deadline through the application correction process.

(x) "Waiting period" means a specified period of time that a person who has obtained a bear permit must wait before applying for any other bear permit.

(y) "Written permission" means written authorization from the owner or person in charge to enter upon private lands and must include:

(i) the name and signature of the owner or person in charge;

(ii) the address and phone number of the owner or person in charge;

(iii) the name of the dog handler given permission to enter the private lands;

(iv) a brief description of the pursuit activity authorized;

(v) the appropriate dates; and

(vi) a general description of the property.

R657-33-3. Permits for Taking Bear.

(1)(a) To harvest a bear, a person must first obtain a valid limited entry bear permit or a harvest objective bear permit for a specified hunt unit as provided in the guidebook of the Wildlife Board for taking bear.

(b) Any person who obtains a limited entry bear permit or a harvest objective bear permit which allows the use of dogs may pursue bear without a pursuit permit while hunting during the season and on the unit for which the take permit is valid, provided the person is the dog handler.

(2)(i) A person may not apply for or obtain more than one bear permit per year, except:

(ii) if the person is unsuccessful in the drawing administered by the division under R657-62, the person may purchase a permit available outside of the drawing; and

(iii) a person may acquire more than one bear control permit as described in R657-33-23(4).

(3) Any bear permit purchased after the season opens is

not valid until three days after the date of purchase.

(4) Residents and nonresidents may apply for and receive limited entry bear permits, and may purchase harvest objective bear permits and bear pursuit permits.

(5)(a) A person must complete a mandatory orientation course prior to applying for or obtaining a limited entry, harvest objective, or bear pursuit permit.

(b) The orientation course is not required to receive a bear control permit under R657-33-23(4).

(6) To obtain a limited entry, harvest objective, or bear pursuit permit, a person must possess a valid Utah hunting or combination license.

R657-33-4. Permits for Pursuing Bear.

(1)(a) To pursue bear without a limited entry or harvest objective bear permit, the dog handler must:

(i) obtain a valid bear pursuit permit from a division office or through the drawing administered pursuant to R657-62; or

(ii) possess the documentation and certifications required in R657-33-26(2) to pursue bear for compensation.

(b) A bear pursuit permit or exemption therefrom does not allow a person to kill a bear.

(2) Residents and nonresidents may purchase bear pursuit permits consistent with the requirements of this rule and the guidebooks of the Wildlife Board.

(3) To obtain a bear pursuit permit, a person must possess a valid Utah hunting or combination license.

R657-33-5. Hunting Hours.

Bear may be taken or pursued only between one-half hour before official sunrise through one-half hour after official sunset.

R657-33-6. Firearms and Archery Equipment.

(1) For limited entry and harvest objective hunts identified as an "any legal weapon hunt" in the Wildlife Board's guidebook for taking bear, a person may use the following to take bear:

(a) any firearm not capable of being fired fully automatic, except a firearm using a rimfire cartridge;

(b) archery equipment meeting the following requirements:

(i) the minimum bow pull is 40 pounds at the draw or the peak, whichever comes first; and

(ii) arrowheads used have two or more sharp cutting edges that cannot pass through a 7/8 inch ring;

(iii) expanding arrowheads cannot pass through a 7/8 inch ring when expanded; and

(iv) arrows must be a minimum of 20 inches in length from the tip of the arrowhead to the tip of the nock, and must weigh at least 300 grains; and

(c) a crossbow meeting the following requirements:

(i) a minimum draw weight of 125 pounds;

(ii) a minimum draw length of 14 inches from the front of the bow to the nocking point;

(iii) a stock that is at least 18 inches long;

(iv) a positive mechanical safety mechanism; and

(v) an arrow or bolt that is at least 16 inches long with:

(A) a fixed broadhead that is at least 7/8 inch wide at the widest point; or

(B) an expandable, mechanical broadhead that is at least 7/8 inch wide at the widest point when the broadhead is in the open position.

(3) Arrows and bolts carried in or on a vehicle where a person is riding must be in an arrow quiver or a closed case.

(4)(a) A person who has obtained a limited entry bear archery permit may not use, possess, or be in control of a firearm, crossbow, or draw-lock while in the field during an

archery bear hunt.

(i) "Field" for purposes of this subsection, means a location where the permitted species of wildlife is likely to be found. "Field" does not include a hunter's established campsite or the interior of a fully enclosed automobile or truck.

(b) The provisions of Subsection (a) do not apply to:

(i) a person licensed to hunt upland game or waterfowl provided the person complies with Rules R657-6 and R657-9 and the Upland Game Guidebook and Waterfowl guidebook, respectively, and possesses only legal weapons authorized to take upland game or waterfowl;

(ii) a person licensed to hunt big game species during hunts that coincide with the archery bear hunt;

(iii) livestock owners protecting their livestock; or

(iv) 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 protected wildlife.

R657-33-7. Traps and Trapping Devices.

(1) Bear may not be taken with a trap, snare or any other trapping device, except as authorized by the division.

(2) Bear accidentally caught in any trapping device must be released unharmed.

(3)(a) Written permission must be obtained from a division representative to remove the carcass of a bear from any trapping device.

(b) The carcass shall remain the property of the state of Utah and must be surrendered to the division.

R657-33-8. State Parks.

(1) Hunting of any wildlife is prohibited within the boundaries of all state park areas except those designated by the Division of Parks and Recreation in Section R651-614.

(2) Hunting with a rifle, handgun or muzzleloader in park areas designated open is prohibited within one mile of all area park facilities, including buildings, camp or picnic sites, overlooks, golf courses, boat ramps and developed beaches.

(3) Hunting with shotguns, crossbows, and archery tackle is prohibited within one quarter mile of the above stated areas.

R657-33-9. Prohibited Methods.

(1) Bear may be taken or pursued only during open seasons and using methods prescribed in this rule and the guidebook of the Wildlife Board for taking and pursuing bear. Otherwise, under the Wildlife Resources Code, it is unlawful for any person to possess, capture, kill, injure, drug, rope, trap, snare, or in any way harm or transport bear.

(2) After a bear has been pursued, chased, treed, cornered, legally baited or held at bay, a person may not, in any manner, restrict or hinder the animal's ability to escape.

(3) A person may not engage in a canned hunt.

(4) A person may not take any wildlife from an airplane or any other airborne vehicle or device or any motorized terrestrial or aquatic vehicle, including snowmobiles and other recreational vehicles.

R657-33-10. 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 weapon to hunt or take wildlife.

R657-33-11. Party Hunting.

A person may not take a bear for another person.

R657-33-12. Use of Dogs.

(1) Dogs may be used to take or pursue bear only during authorized hunts as provided in the guidebook of the Wildlife Board for taking bear.

(2) A dog handler may pursue bear in a unit and during a season permitting the use of dogs, provided he or she possesses:

(a) a valid limited entry or harvest objective bear permit issued to the dog handler;

(b) a valid bear pursuit permit; or

(c) the documentation and certifications required in R657-33-26(2) to pursue bear for compensation.

(3) When dogs are used to pursue a bear, the licensed hunter intending to take the bear must be present when the dogs are released and must continuously participate in the hunt thereafter until the hunt is completed.

(4) When dogs are used to take a bear and there is not an open pursuit season, the dog handler must have:

(a) a limited entry or harvest objective bear permit authorizing the use of dogs issued to the dog handler for the unit being hunted;

(b)(i) a valid bear pursuit permit; and

(ii) be accompanied, as provided in Subsection (3), by a hunter possessing a limited entry or harvest objective bear permit authorizing the use of dogs for the unit being hunted; or

(c)(i) the documentation and certifications required in R657-33-26(2) to pursue bear for compensation; and

(ii) be accompanied, as provided in Subsection (3), by a paying client possessing a limited entry or harvest objective bear permit authorizing the use of dogs for the unit being hunted.

(5) A dog handler may pursue bear under:

(a) a bear pursuit permit only during the season and in the areas designated by the Wildlife Board in guidebook open to pursuit;

(b) a limited entry or harvest objective bear permit authorizing the use of dogs only during the season and in the area designated by the Wildlife Board in guidebook for that permit; or

(c) the pursuit for compensation provisions in this rule only during the seasons and in the areas designated by the Wildlife Board in guidebook open to pursuit.

(6) When dogs are used to pursue or take a bear, no more than eight dogs may be used in the field at one time while pursuing during the summer pursuit seasons as established by the Wildlife Board in guidebook.

R657-33-13. Certificate of Registration Required for Bear Baiting.

(1) A certificate of registration for baiting must be obtained before establishing a bait station.

(2) Certificates of registration for bear baiting are issued only to holders of limited entry permits authorizing the use of bait, as provided in the guidebook of the Wildlife Board for

taking bear.

(3) A certificate of registration may be obtained from the division office within the region where the bait station will be established.

(4) A new certificate of registration must be obtained prior to moving a bait station. All materials used as bait must be removed from the old site prior to the issuing of a new certificate of registration.

(5) The following information must be provided to obtain a certificate of registration for baiting: a 1:24000 USGS quad map with the bait location marked, or the Universal Transverse Mercator (UTM) or latitude and longitude coordinates of the bait station, including the datum, type of bait used and written permission from the appropriate landowner for private lands.

(6)(a) Any person interested in baiting on lands administered by the U.S. Forest Service or Bureau of Land Management must verify that the lands are open to baiting before applying for and receiving a certificate of registration for bear baiting.

(b) Information on areas that are open to baiting on National Forests must be obtained from district offices. Baiting locations and applicable travel restrictions must be verified by the district supervisor prior to applying for a certificate of registration.

(c) Areas generally closed to baiting stations by these federal agencies include:

(i) designated Wilderness Areas;

(ii) heavily used drainages or recreation areas; and

(iii) critical watersheds.

(d) The division shall send a copy of the certificate of registration to the private landowner or appropriate district office of the land management agency that manages the land where the bait station will be placed, as identified by the hunter on the application for a certificate of registration.

(e) Issuance of a certificate of registration for baiting does not authorize an individual to bait if it is otherwise unlawful to bait under the regulations of the applicable land management agency.

(7) A handling fee must accompany the application.

(8) Only hunters listed on the certificate of registration may hunt over the bait station and the certificate of registration must be in possession while hunting over the bait station.

(9) Any person tending a bait station must be listed on the certificate of registration.

R657-33-14. Use of Bait.

(1)(a) A person who has obtained a limited entry bear archery permit may use archery tackle only, even when hunting bear away from the bait station.

(b) A person who has obtained a limited entry bear permit for a season and hunt unit that allows baiting may use firearms and archery equipment as provided in R657-33-6.

(c) Bear lured to a bait station may only be taken using firearms and archery equipment approved by the Wildlife Board and described in the guidebook for taking bear.

(d) A person may establish or use no more than two bait stations. The bait stations may only be used during an open season.

(e) Bear lured to a bait station may not be taken with dogs.

(f) Bait may not be contained in or include any metal, glass, porcelain, plastic, cardboard, or paper.

(g) The bait station must be marked with a sign provided by the division and posted within 10 feet of the bait.

(2)(a) Bait may be placed only in areas open to hunting and only during the open seasons.

(b) All materials used as bait must be removed within

72 hours after the close of the season or within 72 hours after the person or persons, who are registered for that bait station harvest a bear.

(3) A person may use nongame fish as bait, except those listed as prohibited in Rule R657-13 and the guidebook of the Wildlife Board for Taking Fish and Crayfish. No other species of protected wildlife may be used as bait.

(4)(a) Domestic livestock or its parts, including processed meat scraps, may be used as bait.

(b) A person using domestic livestock or their parts for bait must have in possession:

(i) a certificate of brand inspection, bill of sale, or other proof of ownership or legal possession.

(5) Bait may not be placed within:

(a) 100 yards of water or a public road or designated trail;

(b) 1/2 mile of any permanent dwelling or campground; or

(c) any area identified as potentially increasing nuisance bear activity by the division.

(6) Violations of this rule and the guidebook of the Wildlife Board for taking and pursuing bear concerning baiting on federal lands may be a violation of federal regulations and prosecuted under federal law.

R657-33-15. Tagging Requirements.

(1) The carcass of a bear must be tagged in accordance with Section 23-20-30.

(2) The carcass of a bear must be tagged with a temporary possession tag before the carcass is moved from or the hunter leaves the site of kill.

(3) A person may not hunt or pursue bear after the notches have been removed from the tag or the tag has been detached from the permit.

(4) The temporary possession tag:

(a) must remain attached to the pelt or unskinned carcass until the permanent possession tag is attached; and

(b) is only valid for 48 hours after the date of kill.

(5) A person may not possess a bear pelt or unskinned carcass without a valid permanent possession tag affixed to the pelt or unskinned carcass. This provision does not apply to a person in possession of a properly tagged carcass or pelt within 48 hours after the kill, provided the person was issued and is in possession of a valid permit.

R657-33-16. Evidence of Sex and Age.

(1) Evidence of sex must remain attached to the carcass or pelt of each bear until a permanent tag has been attached by the division.

(2) The pelt and skull must be presented to the division in an unfrozen condition to allow the division to gather management data.

(3) The division may seize any pelt not accompanied by its skull.

R657-33-17. Permanent Tag.

(1) Each bear must be taken by the permit holder to a conservation officer or division office within 48 hours after the date of kill to have a permanent possession tag affixed to the pelt or unskinned carcass.

(2) A person may not possess a green pelt after the 48-hour check-in period, ship a green pelt out of Utah, or present a green pelt to a taxidermist if the green pelt does not have a permanent possession tag attached.

R657-33-18. Transporting Bear.

Bear that have been legally taken may be transported by the permit holder provided the bear is properly tagged and the permittee possesses a valid permit.

R657-33-19. Exporting Bear from Utah.

(1) A person may export a legally taken bear or its parts if that person has a valid permit and the bear is properly tagged with a permanent possession tag.

(2) A person may not ship or cause to be shipped from Utah, a bear pelt without first obtaining a shipping permit issued by an authorized division representative.

R657-33-20. Donating.

(1) A person may donate protected wildlife or their parts to another person in accordance with Section 23-20-9.

(2) A written statement of donation must be kept with the protected wildlife or parts showing:

(a) the number and species of protected wildlife or parts donated;

(b) the date of donation;

(c) the permit number of the donor and the permanent possession tag number; and

(d) the signature of the donor.

(3) A green pelt of any bear donated to another person must have a permanent possession tag affixed.

(4) The written statement of donation must be retained with the pelt.

R657-33-21. Purchasing or Selling.

(1) Legally obtained tanned bear hides may be purchased or sold.

(2) A person may not purchase, sell, offer for sale or barter a green pelt, gall bladder, tooth, claw, paw or skull of any bear.

R657-33-22. Waste of Wildlife.

(1) A person may not waste or permit to be wasted or spoiled any protected wildlife or their parts in accordance with Section 23-20-8.

(2) The skinned carcass of a bear may be left in the field and does not constitute waste of wildlife, however, the division recommends that hunters remove the carcass from the field.

R657-33-23. Livestock and Commercial Crop Depredation.

(1) If a bear is harassing, chasing, disturbing, harming, attacking or killing livestock, or has committed such an act within the past 72 hours:

(a) the livestock owner, an immediate family member or an employee of the owner on a regular payroll, and not hired specifically to take bear, may kill the bear;

(b) a landowner or livestock owner may notify the division of the depredating bear and the division may:

(i) authorize a local hunter to take a bear using a valid permit; or

(ii) request that the offending bear be removed by Wildlife Services specialist, supervised by the USDA Wildlife Program; or

(c) the livestock owner may notify a Wildlife Services specialist of the depredation, and that specialist or another agency employee may take the depredating bear.

(2) Depredating bear may be taken at any time by a Wildlife Services specialist while acting in the performance of the person's assigned duties and in accordance with procedures approved by the division.

(3) A depredating bear may be taken by those persons authorized in Subsection (1)(a) with:

(a) any weapon authorized for taking bear; or

(b) snares only with written authorization from the director of the division and subject to all the conditions and restrictions set out in the written authorization.

(i) The option in Subsection (3)(b) may only be

authorized in the case of chronic depredation verified by Wildlife Services or division personnel where numerous livestock have been killed by a depredating bear.

(4)(a) The division may issue one or more control permits to an owner or lessee of private land to remove a bear causing damage to cultivated crops on cleared and planted land provided the following conditions are satisfied:

(i) the landowner or lessee contacts the appropriate division office within 72 hours of the damage occurring or provides documentation of previous chronic damage incidents;

(ii) the damaged cultivated crop is raised and utilized by the landowner or lessee for commercial gain and with a reasonable expectation of generating a profit;

(iii) at least 5 acres of the private land is placed in agricultural use pursuant to Section 59-2-502 and eligible for agricultural use valuation as provided in Sections 59-2-503 and 59-2-504;

(iv) the division confirms that the private land where the cultivated crop occurs has experienced chronic recurring damage from bears, or that there will likely be chronic recurring damage if offending bears are not immediately removed;

(v) the landowner, an immediate family member, or an employee of the owner on a regular payroll, and not hired specifically to take bear, receives the control permit from the division to remove the bear prior to initiating such action; and

(vi) the bear removal is otherwise in accordance with Utah law.

(b) The division may issue control permits described in Subsection (4)(v) and to identify restrictions necessary to balance the threat to commercial crops on cleared and planted land and the wildlife resource, such as:

(i) locations on the landowner or lessee's private property where offending bears may be taken;

(ii) the total number of control permits that may be issued; and

(iii) reporting requirements to the division.

(c) Nothing herein mandates the division to issue control permits for a landowner or lessee to remove bears from their private property in lieu of:

(i) the landowner or lessee taking nonlethal preventative measures in protecting their private property; and

(ii) the division undertaking wildlife management techniques as they deem appropriate.

(5)(a) Any bear taken pursuant to Subsections (1)(a) and (4) shall:

(i) be delivered to a division office or employee within 48 hours; and

(ii) remain the property of the state, except the division may sell a bear damage permit to a person who has killed a depredating bear if that person wishes to maintain possession of the bear.

(b) A person may only retain one bear carcass annually under this Section.

(6)(a) Hunters interested in taking depredating bear as provided in Subsection (1)(b) may contact the division.

(b) Hunters will be contacted by the division to take depredating bear as needed.

R657-33-24. Questionnaire.

Each permittee who receives a questionnaire should return the questionnaire to the division regardless of success. Returning the questionnaire helps the division evaluate population trends, determine harvest success and other valuable information.

R657-33-25. Taking Bear.

(1)(a) A person who has obtained a bear permit,

excluding limited entry archery bear permit, may use any legal weapon to take one bear during the season and within the hunt unit(s) specified on the permit.

(b) A person who has obtained a limited entry bear archery permit may use only archery tackle to take on bear during the season and within the hunt units(s) specified on the permit.

(c) Harvest objective permits may be purchased on a first-come, first-served basis as provided in the guidebook of the Wildlife Board for taking bear.

(2)(a) A person may not take or pursue a cub, or a sow accompanied by cubs.

(b) Any bear, except a cub or a sow accompanied by cubs, may be taken during the prescribed seasons.

(3) Limited entry permits may be obtained by following the application procedures provided in this rule and the guidebook of the Wildlife Board for taking and pursuing bear.

(4) Season dates, closed areas, harvest objective permit areas and limited entry permit areas are published in the guidebook of the Wildlife Board for taking and pursuing bear.

R657-33-26. Bear Pursuit.

(1)(a) Except as provided in rule R657-33-3(1)(b) and Subsection (2), bear may be pursued only by persons who have obtained a bear pursuit permit.

(b) The bear pursuit permit does not allow a person to:

(i) kill a bear; or

(ii) pursue bear for compensation.

(c) A person may pursue bear for compensation only as provided in Subsection (2).

(d) To obtain a bear pursuit permit, a person must possess a Utah hunting or combination license.

(2)(a) A person may pursue bear on public lands for compensation, provided the dog handler:

(i) receives compensation from a client or customer to pursue bear;

(ii) is a licensed hunting guide or outfitter under Title 58, Chapter 79 of the Utah Code and authorized to pursue bear;

(iii) possesses on his or her person the Utah hunting guide or outfitter license;

(iv) possesses on his or her person all permits and authorizations required by the applicable public lands managing authority to pursue bear for compensation; and

(v) is accompanied by the client or customer at all times during pursuit.

(b) A person may pursue bear on private lands for compensation, provided the dog handler:

(i) receives compensation from a client or customer to pursue bear;

(ii) is accompanied by the client or customer at all times during pursuit; and

(iii) possesses on his or her person written permission from all private landowners on whose property pursuit takes place.

(c) A person who is an employee or agent of the Division of Wildlife Services may pursue bear on public lands and private lands while acting within the scope of their employment.

(3) A pursuit permit is not required to pursue bear under Subsection (2).

(4)(a) A person pursuing bear for compensation under subsections (2)(a) and (2)(b) shall comply with all other requirements and restrictions in statute, rule and the guidebooks of the Wildlife Board regulating the pursuit and take of bear.

(b) Any violation of, or failure to comply with the provisions of Title 23 of the Utah Code, this rule, or the guidebooks of the Wildlife Board may be grounds for

suspension of the privilege to pursue bear for compensation under this subsection, as determined by a division hearing officer.

(5) Except as provided in Subsection (6), a bear pursuit permit authorizes the holder to pursue bear with dogs on any unit open to pursuing bear during the seasons and under the conditions prescribed by the Wildlife Board in guidebook.

(6) The Wildlife Board may establish or designate in guidebook restricted pursuit units as determined necessary or convenient to better manage wildlife resources, including to protect wildlife, curtail over-utilization of resources, reduce conflict with other recreational activities, reduce conflict with private and public land activities, and protect wildlife habitat.

(a) Bear may not be pursued on a restricted pursuit unit unless the dog handler:

(i) possesses a pursuit permit issued for the particular restricted pursuit unit;

(ii) possesses or is accompanied by a person who possesses a limited entry or harvest objective bear permit allowing the use of dogs, and the pursuit occurs within the area and during the season established by the respective permit; or

(iii) is engaged in pursuit for compensation as provided in Subsection (2), and pursuit occurs within the area and during the season established for the:

(A) paying client's limited entry or harvest objective bear permit allowing the use of dogs; or

(B) restricted pursuit unit.

(b) A pursuit permit issued for a restricted pursuit unit authorizes the holder to pursue bear on:

(i) the particular restricted pursuit unit for which the permit is issued; and

(ii) any other bear pursuit unit not designated as a restricted pursuit unit.

(c) Notwithstanding Subsection (6)(a)(i), when two or more dog owners are in the field pursuing bear together with a single pack of eight dogs or less on a restricted pursuit unit, only one must possess a restricted pursuit unit permit, provided the dog owners accompany the person possessing the restricted pursuit unit permit at all times.

(i) A dog owner pursuing bear on a restricted pursuit unit may leave the pursuit permit holder to retrieve dogs that separate from the pack, provided the dog owner;

(A) takes reasonable steps to keep the pack together before and during pursuit;

(B) separates from the pursuit permit holder exclusively to retrieve stray dogs and does not attempt to actively pursue bear during the retrieval process; and

(C) immediately releases any bear incidentally treed or held at bay by the stray dogs.

(7) Pursuit permits may be obtained at division offices, through the Internet and at license agents.

(a) The division may distribute pursuit permits for restricted pursuit units:

(i) through its offices, license agents, or online resources on a first-come, first-served basis; or

(ii) through a random drawing.

(8) A person may not:

(a) take or pursue a female bear with cubs;

(b) repeatedly pursue, chase, tree, corner or hold at bay the same bear during the same day;

(c) individually or in combination with another person, use more than eight dogs in the field to pursue a bear during the summer pursuit season as established by the Wildlife Board in guidebook; or

(d) possess a firearm or any device that could be used to kill a bear while pursuing bear.

(i) The weapon restrictions set forth in Subsection (d) do not apply to 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 or attempting to utilize the concealed weapon to injure or kill bear.

(9) If eligible, a person who has obtained a bear pursuit permit may also obtain a limited entry or harvest objective bear permit.

(10) Season dates, closed areas and bear pursuit permit areas are published in the guidebook of the Wildlife Board for taking and pursuing bear.

R657-33-27. Limited Entry Bear Permit Application Information.

(1) Limited entry bear permits are issued pursuant to R657-62-19.

R657-33-28. Waiting Period.

(1) Any person who obtains a limited entry permit may not apply for a permit in a division drawing for a period of two years.

(2) Individuals who obtain a conservation permit, sportsman permit, control permit, or harvest objective permit for bear are not subject to a waiting period.

R657-33-29. Harvest Objective General Information.

(1) Harvest objective permits are valid only for the open harvest objective management units and for the specified seasons published in the guidebook of the Wildlife Board for taking bear.

(2) Harvest objective permits are not valid in a specified unit after the harvest objective has been met for that harvest objective unit.

R657-33-30. Harvest Objective Permit Sales.

(1) Harvest objective permits are available on a first-come, first-served basis beginning on the date published in the guidebook of the Wildlife Board for taking bear.

(2) Any bear permit purchased after the season opens is not valid until three days after the date of purchase.

(3) A person must possess a valid hunting or combination license to obtain a harvest objective permit.

R657-33-31. Harvest Objective Unit Closures.

(1) Prior to hunting in a harvest objective unit, a hunter must call 1-888-668-5466 or visit the division's website to verify that the bear hunting unit is still open. The phone line and website will be updated each day by 12 noon. Updates become effective the following day thirty minutes before official sunrise.

(2) Harvest objective units are open to hunting until:

(a) the bear harvest objective for that harvest objective unit is met and the division closes the area; or

(b) the end of the hunting season as provided in the guidebook of the Wildlife Board for taking bear.

(3) Upon closure of a harvest objective unit, a hunter may not take or pursue bear except as provided in Section R657-33-26.

R657-33-32. Harvest Objective Unit Reporting.

(1) Any person taking a bear with a harvest objective permit must report to the division, within 48 hours, where the bear was taken and have a permanent tag affixed pursuant to Section R657-33-17.

(2) Failure to accurately report the correct harvest objective unit where the bear was killed is unlawful.

(3) Any conviction for failure to accurately report, or aiding or assisting in the failure to accurately report as required in Subsection (1) shall be considered prima facie evidence of a knowing, intentional or reckless violation for purposes of permit suspension.

R657-33-33. Fees.

The permit fees and handling fees must be paid pursuant to Rule R657-42-8(5).

R657-33-34. Drawings and Remaining Permits.

Remaining limited entry bear permits are issued pursuant to R657-62.

R657-33-35. Bonus Points.

Bonus points are accrued and used pursuant to R657-62-8.

R657-33-36. Refunds.

(1) Unsuccessful applicants will not be charged for a permit.

(2) The handling fees and hunting or combination license fees are nonrefundable.

R657-33-37. Duplicate License and Permit.

Whenever any unexpired license, permit, tag or certificate of registration is destroyed, lost or stolen, a person may obtain a duplicate in accordance with R657-42.

KEY: wildlife, bear, game laws

March 16, 2015

Notice of Continuation December 5, 2012

23-14-18

23-14-19

23-13-2

R657. Natural Resources, Wildlife Resources.**R657-38. Dedicated Hunter Program.****R657-38-1. Purpose and Authority.**

(1) Under the authority of Section 23-14-18, this rule provides the standards and requirements for qualified deer hunters to participate in the Dedicated Hunter Program by obtaining a certificate of registration.

(2) The Dedicated Hunter Program is a program that provides:

- (a) expanded hunting opportunities;
- (b) opportunities to participate in projects that are beneficial to wildlife; and
- (c) education in hunter ethics and wildlife management principles.

R657-38-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

- (a) "Dedicated Hunter Permit" means a general buck deer permit issued to a participant in the Dedicated Hunter Program, which authorizes the participant to hunt deer during the general archery, general muzzleloader and general any weapon open seasons in the hunt area specified on the permit.
- (b) "Hunt area" means an area prescribed by the Wildlife Board where general archery, general muzzleloader and general any weapon deer hunting is open to permit holders for taking deer.
- (c) "Participant" means a person who has remitted the appropriate fee and has been issued a Dedicated Hunter certificate of registration.
- (d) "Program" means the Dedicated Hunter Program
- (e) "Program harvest" means using a Dedicated Hunter permit to tag a harvested deer or failing to return a Dedicated Hunter permit with attached kill tag, while enrolled in the program.
- (f) "Wildlife conservation project" means any project that provides wildlife habitat protection or enhancement, improves hunting or fishing access, or directly benefits wildlife or the Division's current needs and is pre-authorized by the Division.

R657-38-3. Dedicated Hunter Certificates of Registration.

(1)(a) To become a participant in the program a person must apply for, obtain, and sign a Dedicated Hunter certificate of registration. A participant is not required to have the Dedicated Hunter certificate of registration on their person while hunting.

(b) Certificates of registration are issued by the Division through a drawing as prescribed in the guidebook of the Wildlife Board for taking big game and R657-62.

(c) Certificates of registration are valid for 3 consecutive years, except as provided by R657-38-(10), beginning on the date the big game drawing results are released and ending on the last day of the general season hunt for the 3rd year of enrollment.

(d) The number of Dedicated Hunter certificates of registration is limited to 15% of the total annual general season quota for each perspective hunt area.

(i) Certificates of registration remaining unissued from the Dedicated Hunter portion of the big game drawing shall be redistributed as general single-season permits for their respective hunt areas in the general buck deer drawing.

(2) The Division may deny, suspend, or revoke a Dedicated Hunter certificate of registration for any of the following reasons:

- (a) The drawing application contains false information;
- (b) The person, at the time of application, or during the program enrollment, is under a judicial or administrative

order suspending any wildlife hunting or fishing privilege within Utah or elsewhere;

(c) The person has violated the terms of any certificate of registration issued by the Division or an associated agreement.

(3) A person under any wildlife suspension may not apply for a certificate of registration until their suspension period has ended.

(4) A certificate of registration authorizes the participant to use a Dedicated Hunter permit to hunt deer within the area listed on the permit, during the general archery, general muzzleloader and general any legal weapon buck deer hunts according to the dates and boundaries established by the Wildlife Board. When available, the certificate of registration may also authorize hunting within the general archery extended area during the extended season dates.

(5) The participant's hunt area, issued through the drawing, shall remain the same for the duration of that program enrollment period.

(6) Participants of the program shall be subject to any changes subsequently made in this rule during the term of enrollment, unless a variance is authorized by the Division.

R657-38-4. Applications for Certificates of Registration.

(1) Application to obtain a Dedicated Hunter certificate of registration is pursuant to R657-62-16

(a) Applicants must meet all age requirements and proof of hunter education and license requirements pursuant to Sections 23-19-11, 23-19-22, 23-19-24, and 23-19-26.

(i) Any person who is 12 years of age or older may apply for a Dedicated Hunter certificate of registration.

(ii) A person 11 years of age may apply for or obtain a Dedicated Hunter certificate of registration if that person's 12th birthday falls in the calendar year the certificate is issued. A person may not hunt big game prior to their 12th birthday.

R657-38-5. Dedicated Hunter Preference Point System.

(1) Dedicated Hunter Preference points are issued pursuant to R657-62-10.

R657-38-6. Fees.

(1) Any person who is 17 years of age or younger on July 31st of the application year shall pay the youth participant fees.

(2) Any person who is 18 years of age or older on July 31st of the application year shall pay the adult participant fees.

(3) Lifetime License holders shall pay a reduced fee as authorized by the annual fee schedule.

(4) A participant who enters the program as a Utah resident and becomes a nonresident, shall be changed to a nonresident status and may be issued a nonresident permit at no additional charge for the remainder of the three-year enrollment period.

(5) A participant who enters the program as a nonresident and becomes a Utah resident, shall be changed to a resident status and may be issued a resident permit with no reimbursement of the higher nonresident fee for the remainder of the three-year enrollment period.

R657-38-7. Refunds.

(1) A refund for the Dedicated Hunter certificate of registration may not be issued, except as provided in Section 23-19-38.2 and R657-42.

(2) Any eligible refund will be issued pro rata, based on the number of years in which any portion of a hunt was participated in during the enrollment period.

(3) Drawing application fees are nonrefundable.

R657-38-8. Wildlife Conservation and Ethics Course Requirement.

(1) Prior to obtaining the first Dedicated Hunter permit of the program, a participant must complete the wildlife conservation and ethics course.

(2) The wildlife conservation and ethics course is available through the Division's Internet site.

(3) The Division shall keep a record of all participants who complete the wildlife conservation and ethics course.

R657-38-9. Service Hour Requirement.

(1)(a) Except as provided in R657-38-14, each participant in the program shall provide a minimum of 32 hours of service as a volunteer on Division approved wildlife conservation projects.

(i) A participant may obtain a permit in the 1st year of the program without having provided service hours.

(ii) A participant must have completed a minimum of 16 service hours prior to receiving a Dedicated Hunter permit in the 2nd year of the program.

(iii) A participant must have completed a minimum of 16 additional service hours prior to receiving a Dedicated Hunter permit in the 3rd year of the program.

(b) If the participant fails to have the minimum of 32 hours completed at the expiration of the 3rd year, the participant will be ineligible to apply for or obtain any permits until the remaining hours have been paid for or completed.

(i) After a certificate of registration has expired, incomplete service hours may be completed through Division approved wildlife conservation projects or by payment at the hour buyout rate.

(c) Residents may not purchase more than 24 of the 32 total required service hours. Nonresidents may purchase all of the 32 total required service hours.

(d) If a participant fails to fulfill the wildlife conservation project requirements in any year of participation, the participant shall not be issued a Dedicated Hunter permit for that year.

(2) Wildlife conservation projects may be designed by the Division, or any other individual or entity, but must be pre-approved by the Division.

(a) Goods or services provided to the Division for wildlife conservation projects by a participant may be, at the discretion of the Division, substituted for service hours based upon current market values for the goods or services, and using the approved hourly service buyout rate when applying the credit.

(i) Goods or material donations that are specifically requested and accepted by the Division may be considered as service project hours.

(b) The Division shall publicize the dates, times, locations and description of approved wildlife conservation projects and activities on the Division's Internet site.

(3) Service hours must be completed within the enrollment period.

(a) Service hours exceeding the 32 hour minimum shall not be applicable beyond the enrollment period and shall not be applied to subsequent certificate of registrations.

(4) Participants are required to perform their own service hours.

(a) Service hours are not transferrable to other participants or certificates of registration.

R657-38-10. Service Hour Exceptions and Program Extension.

(1) The program service hour requirements may be waived on an annual basis if;

(a) The participant provides evidence of leaving the

state for a minimum period of one year during the enrollment period for religious or educational purposes.

(i) If the participant requests that the program service hour requirements be waived, and the request is granted, the participant shall not receive a Dedicated Hunter permit for the year in which the program requirements were waived

(b) The participant is a member of the United States Armed Forces or public health or public safety organization and is mobilized or deployed on order in the interest of national defense or emergency

(2) A person who is a member of the United States Armed Forces or public safety organization that is mobilized or deployed may request;

(a) That the remainder of their program enrollment period be postponed until return from their period of mobilization or deployment;

(b) That the program requirements be postponed into a subsequent year of the enrollment

(c) That the program service hour requirements be waived if the participant is prevented from completing the requirements due to the mobilization or deployment.

(A) The participant must provide evidence of the mobilization or deployment period.

(B) The Division shall determine a pro rata schedule in which the service hour requirements waived correlate with the term length of the deployment or mobilization.

R657-38-11. Allowable Harvest and Permit Return Requirements.

(1)(a) Except as provided in section R657-38-12, a program participant may take up to 2 deer within the enrollment period and only 1 deer may be harvested in a single year.

(b) The harvest of an antlerless deer using a Dedicated Hunter permit, when permissible in the extended archery areas and seasons established in the big game guidebook, shall be considered a program harvest.

(2) Upon issue of a Dedicated Hunter permit, the participant is credited with a program harvest.

(a) 2 program harvests are allowed within the enrollment

(b) If program harvests are accrued during the 1st year and 2nd year of the enrollment, a permit shall not be issued for the 3rd year.

(c) In order to remove a program harvest credit, the participant;

(i) must not have harvested a deer with the Dedicated Hunter permit, and

(ii) must return the permit and attached tag, or a qualifying affidavit for duplication as proof of non-harvest to a Division office. A handling fee may be assessed for processing an affidavit.

R657-38-12. Dedicated Hunter Permits.

(1) Pursuant to Sections 23-19-24 and 23-19-26 person must have a valid Utah hunting or combination license to be issued a big game permit.

(2) The participant must have a valid Dedicated Hunter permit in possession while hunting.

(3) Upon completion of the minimum annual requirements, a Dedicated Hunter permit may be issued. The method and dates in which the Division issues and distributes Dedicated Hunter permits shall be published on the Division's website or in the guidebook of the Wildlife Board for taking big game.

(4) The Division may exclude multiple season opportunities on specific management units due to extenuating circumstances on a portion or all of a hunt area.

(5)(a) The Division may issue a duplicate Dedicated

Hunter permit pursuant to Section 23-19-10.

(b) If a participant's unused Dedicated Hunter permit and tag is destroyed, lost, or stolen prior to, or during the hunting season in which the permit is valid, a participant may obtain a duplicate. A handling fee may be assessed for the duplication.

(c) A duplicate Dedicated Hunter permit shall not be issued after the closing date of the general buck deer season.

(6)(a) A participant may surrender a Dedicated Hunter permit in accordance with Rule R657-42.

(b) A participant may not surrender a Dedicated Hunter permit once the general archery deer hunt has begun, unless the Division can verify that the permit was never in the participant's possession.

(7)(a) Lifetime license holders may participate in the program.

(b) The Lifetime license holder shall apply for a certificate of registration in the same manner as all other prospective participants.

(c) Upon joining and for the duration of enrollment in the program, the lifetime license holder agrees to temporarily forego any rights to receive a lifetime license buck deer permit as provided in Section 23-19-17.5.

(d) A refund or credit is not issued for a forgone lifetime license permit.

R657-38-13. Obtaining Other Permits.

(1) Participants may not apply for or obtain any general season buck deer permit, including general landowner buck deer permits, or respective preference points issued by the Division through the big game drawing, license agents, over-the-counter sales, or the internet during an enrollment period in the program.

(a) Any general season deer permit obtained is invalid and must be surrendered prior to the beginning date of that permit. A refund may not be issued pursuant to Section 23-19-3.

(2)(a) Participants may apply for or obtain a limited entry season buck deer permit, including CWMU, limited entry landowner, conservation, expo, and poaching rewards permits.

(i) The limited entry buck deer permit may be obtained without the completion of the annual program requirements, but does not exempt the participant from fulfilling the minimum requirements of the entire enrollment.

(ii) Obtaining a limited entry buck deer permit during the enrollment shall not extend the enrollment period, but shall take the place of one of the 3 possible permit years.

(iii) Harvest with a limited entry buck deer permit shall not be counted as a program harvest.

(b) If the participant obtains a limited entry buck deer permit and has been issued a Dedicated Hunter permit, that permit or the Dedicated Hunter permit must be surrendered as permissible by R657-38-11 and R657-42. A refund may not be issued pursuant to Section 23-19-38.

(i) A participant who obtains a limited entry buck deer permit may only use that permit in the prescribed area and season listed on the permit. Dedicated Hunter privileges are not transferred to that permit.

(ii) The limited entry buck deer permit may not be obtained if the Dedicated Hunter permit has been in possession of the participant during any open portion of the general buck deer season.

(3)(a) Participants may apply for or obtain antlerless deer permits as provided in Rule R657-5 and the guidebook of the Wildlife Board for taking big game.

(b) Except as provided in R657-38-10, harvest of an antlerless deer with an antlerless deer permit shall not be considered a program harvest.

R657-38-14. Certificate of Registration Surrender.

(1) A participant may surrender a Dedicated Hunter certificate of registration pursuant to R657-42-4 provided the participant has not been issued 2 Dedicated Hunter permits in which hunting may have occurred.

(a) if a participant has been issued the 1st permit, the participant must have completed a minimum of 10 service hours prior to an allowable surrender.

(i) if the participant surrendering is physically unable to complete the minimum of 10 service hours due to injury or illness, the Division may authorize another person to fulfill the requirement in the participant's behalf.

(b) a participant may not surrender a certificate of registration if the participant has met the program harvest limit.

(2) The Division may not issue a refund, except as provided in Section 23-19-38 and R657-42 and R657-38-7.

(3) If a Dedicated Hunter permit has been issued in which hunting may have occurred, the participant shall not be eligible for preference points to be reinstated upon surrender of the certificate of registration.

R657-38-15. Certificate of Registration Suspension.

(1) The Division may suspend a Dedicated Hunter certificate of registration pursuant to Section 23-19-9 and R657-26.

(2) A certificate of registration may also be suspended if the participant:

(a) fraudulently submits a time sheet for service hours; or

(b) fraudulently completes any of the program requirements.

(c) is under suspension of any hunting or fishing privileges in any jurisdiction during the participant's enrollment in the program.

(3) A Dedicated Hunter permit is invalid if a participant's certificate of registration is suspended.

(4) The program enrollment period shall not be extended in correlation with any suspension.

KEY: wildlife, hunting, recreation, wildlife conservation

March 16, 2015

23-14-18

Notice of Continuation November 1, 2010

R657. Natural Resources, Wildlife Resources.**R657-41. Conservation and Sportsman Permits.****R657-41-1. Purpose and Authority.**

(1) Under the authority of Section 23-14-18 and 23-14-19, this rule provides the standards and procedures for issuing:

(a) conservation permits to conservation organizations for sale at an auction, or for use as an aid to wildlife related fund raising activities; and

(b) sportsman permits.

(2) The division and conservation organizations shall use all revenue derived from conservation permits under Subsections R657-41-9(4) and R657-41-9(5)(b) for the benefit of the species for which the permit is issued, unless the division and conservation organization mutually agree in writing that there is a higher priority use for other species of protected wildlife.

R657-41-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "Area Conservation Permit" means a permit issued for a specific unit or hunt area for a conservation permit species, and may include an extended season, or legal weapon choice, or both, beyond the season except area turkey permits are valid during any season option and are valid in any open area during general season hunt.

(i) Area Conservation permits issued for limited entry units are not valid on cooperative wildlife management units.

(b) "Conservation Organization" means a nonprofit chartered institution, foundation, or association founded for the purpose of promoting wildlife conservation and has established tax exempt status under Internal Revenue Code, Section 501C-3 as amended.

(c) "Conservation Permit" means any harvest permit authorized by the Wildlife Board and issued by the division for purposes identified in Section R657-41-1.

(d) "Conservation Permit Species" means the species for which conservation permits may be issued and includes deer, elk, pronghorn, moose, bison, Rocky Mountain goat, Rocky Mountain bighorn sheep, desert bighorn sheep, wild turkey, cougar, and black bear.

(e) "Multi-Year Conservation Permit" means a conservation permit awarded to an eligible conservation organization pursuant to R657-41-7 for three consecutive years to sell, market or otherwise use as an aid in wildlife related fund raising activities.

(f) "Retained Revenue" means 60% of the revenue raised by a conservation organizations from the sale of conservation permits that the organization retains for eligible projects, excluding interest earned thereon.

(g) "Special Antelope Island State Park Conservation Permit" means a permit authorized by the Wildlife Board to hunt bighorn sheep or mule deer on Antelope Island State Park.

(h) "Sportsman Permit" means a permit which allows a permittee to hunt during the applicable season dates specified in Subsection (j), and which is authorized by the Wildlife Board and issued by the division in a general drawing, requiring all applicants to pay an application fee and the successful applicant the cost of the permit.

(i) "Single Year Conservation Permit" means a conservation permit awarded to an eligible conservation organization pursuant to R657-41-6 for one year to sell, market or otherwise use as an aid in wildlife related fund raising activities.

(j) "Statewide Conservation Permit" means a permit issued for a conservation permit species that allows a

permittee to hunt:

(i) big game species on any open unit with archery equipment during the general archery season published in the big game proclamation for the unit beginning before September 1, and with any weapon from September 1 through December 31, except pronghorn and moose from September 1 through November 15 and deer and elk from September 1 through January 15;

(ii) two turkeys on any open unit from April 1 through May 31;

(iii) bear on any open unit during the season authorized by the Wildlife Board for that unit;

(iv) cougar on any open unit during the season authorized by the Wildlife Board for that unit and during the season dates authorized by the Wildlife Board on any harvest objective unit that has been closed by meeting its objective;

(v) Antelope Island is not an open unit for hunting any species of wildlife authorized by a conservation or sportsman permit, except for the Special Antelope Island State Park Conservation Permit; and

(vi) Central Mountain/Nebo/Wasatch West sheep unit is open to the Sportsmen permit holder on even number years and open to the Statewide Conservation permit holder on odd number years.

R657-41-3. Determining the Number of Conservation and Sportsman Permits.

(1) The number of conservation permits authorized by the Wildlife Board shall be based on:

(a) the species population trend, size, and distribution to protect the long-term health of the population;

(b) the hunting and viewing opportunity for the general public, both short and long term; and

(c) the potential revenue that will support protection and enhancement of the species.

(2) One statewide conservation permit may be authorized for each conservation permit species.

(3) A limited number of area conservation permits may be authorized as follows:

(a) the potential number of multi-year and single year permits available for Rocky Mountain bighorn sheep and desert bighorn sheep will be calculated based on the number permits issued the year prior to the permits being awarded using the following rule:

(i) 5-14 public permits = 1 conservation permit, 15-24 public permits = 2 conservation permits, 25-34 public permits = 3 conservation permits, 35-44 public permits = 4 conservation permits, 45-54 public permits = 5 conservation permits, 55-64 = 6 conservation permits, 65-74 public permits = 7 conservation permits and >75 public permits = 8 conservation permits.

(b) the potential number of multi-year and single year permits available for the remaining conservation permit species will be calculated based on the number permits issued the year prior to the permits being awarded using the following rule:

(i) 11-30 public permits = 1 conservation permit, 31-50 public permits = 2 conservation permits, 51-70 public permits = 3 conservation permits, 71-90 public permits = 4 conservation permits, 91-110 public permits = 5 conservation permits, 111-130 = 6 conservation permits, 131-150 public permits = 7 conservation permits and >150 public permits = 8 conservation permits.

(4) The number of conservation permits may be reduced if the number of public permits declines during the time period or which multi-year permits were awarded.

(5) The actual number of conservation and sportsman permits available for use will be determined by the Wildlife Board.

(6) Area conservation permits shall be deducted from the number of public drawing permits.

(7) One sportsman permit shall be authorized for each statewide conservation permit authorized.

(8) All area conservation permits are eligible as multi-year permits except that the division may designate some area conservation permits as single year permits based on the applications received for single year permits.

(9) All statewide permits will be multi-year permits except for a second statewide permit issued for a special event.

R657-41-4. Eligibility for Conservation Permits.

(1) Statewide and area conservation permits may be awarded to eligible conservation organizations to market and sell, or to use as an aid in wildlife related fund raising activities.

(2) To be eligible for multi-year conservation permits, a conservation organization must have generated in conservation permit sales during the previous three year period at least one percent of the total revenue generated by all conservation organizations in conservation permit sales during the same period. Conservation organizations eligible for multi-year permits may not apply for single year permits, and conservation organizations ineligible for multi-year permits may only apply for single year permits.

(3) Conservation organizations applying for single year permits may not:

(a) bid for or obtain conservation permits if any employee, officer, or board of director member of the conservation organization is an employee, officer, or board of director member of any other conservation organization that is submitting a bid for single year conservation permits; or

(b) enter into any pre-bidding discussions, understandings or agreements with any other conservation organization submitting a bid for conservation permits regarding:

- (i) which permits will be sought by a bidder;
- (ii) what amounts will be bid for any permits; or
- (iii) trading, exchanging, or transferring any permits after permits are awarded.

R657-41-5. Applying for Conservation Permits.

(1)(a) Conservation organizations may apply for conservation permits by sending an application to the division.

(b) Only one application per conservation organization may be submitted. Multiple chapters of the same conservation organization may not apply individually.

(c) Conservation organizations may apply for single year conservation permits or multi-year conservation permits. They may not apply for both types of conservation permits.

(2) The application must be submitted to the division by September 1 to be considered for the following year's conservation permits. Each application must include:

- (a) the name, address and telephone number of the conservation organization;
- (b) a copy of the conservation organization's mission statement;
- (c) verification of the conservation organization's tax exempt status under Internal Revenue Code, Section 501C-3 as amended; and
- (d) the name of the president or other individual responsible for the administrative operations of the conservation organization;

(3) If applying for single year conservation permits, a conservation organization must also include in its application:

- (a) the proposed bid amount for each permit requested. The proposed bid amount is the revenue the organization

anticipates to be raised from a permit through auction or other lawful fund raising activity.

(b) certification that there are no conflicts of interest or collusion in submitting bids as prohibited in R657-41-4(3);

(c) acknowledgement that the conservation organization recognizes that falsely certifying the absence of collusion may result in cancellation of permits, disqualification from bidding for five years or more, and the filing of criminal charges;

(d) evidence that the application and bid has been reviewed and approved by the board of directors of the bidding conservation.

(e) the type of permit, and the species for which the permit is requested; and

(f) any requested variances for an extended season or legal weapon choice for area conservation permits.

(4) An application that is incomplete or completed incorrectly may be rejected.

(5) The application of a conservation organization for conservation permits may be denied for:

(a) failing to fully report on the preceding year's conservation permits;

(b) violating any provision of this rule, Title 23 of the Utah Code, Title R657 of the Utah Administrative Code, a division proclamation, or an order of the Wildlife Board; or

(c) violating any other law that bears a reasonable relationship to the applicant's ability to responsibly and lawfully handle conservation permits pursuant to this rule.

R657-41-6. Awarding Single Year Conservation Permits.

(1) The division shall recommend the conservation organization to receive each single year conservation permit based on:

- (a) the bid amount pledged to the species, adjusted by:
 - (i) the performance of the organization over the previous two years in meeting proposed bids;
 - (ii) 90% of the bid amount;
 - (iii) the organizations maintaining a minimum two-year average performance of 70% to be eligible for consideration of permits. Performance of the organization is the proportion of the total revenue generated from permit sales, divided by 90% of the bid amount for all permits, calculated annually and averaged for the last two years.

(b) if two or more conservation organizations are tied using the criteria in Subsection (a), the closeness of the organization's purpose to the species of the permit; and

(c) if two or more conservation organizations are tied using the criteria in Subsection (a) and (b), the geographic closeness of the organization to the location of the permit.

(2)(a) Between the time the division recommends that a conservation permit be awarded to a conservation organization and the time the Wildlife Board approves that recommendation, a conservation organization may withdraw its application for any given permit or exchange its application with another conservation organization without penalty, provided the bid amount upon which the permit application was evaluated is not changed.

(b) If a conservation organization withdraws its bid and the bid is awarded to another organization at a lower amount, then the difference between the two bids will be subtracted from the organization making the higher bid for purposes of evaluating organization performance.

(3) The Wildlife Board shall make the final assignment of conservation permits at a meeting prior to December 1 annually.

(4) The Wildlife Board may authorize a conservation permit to a conservation organization, other than the conservation organization recommended by the division, after considering the:

- (a) division recommendation;

- (b) benefit to the species;
 - (c) historical contribution of the organization to the conservation of wildlife in Utah;
 - (d) previous performance of the conservation organization; and
 - (e) overall viability and integrity of the conservation permit program.
- (5) The total of all bids for permits awarded to any one organization shall not exceed \$20,000 the first year an organization receives permits.
- (6) The number of permits awarded to any one organization shall not increase by more than 100% from the previous year.
- (7) If the Wildlife Board authorizes a second statewide conservation permit for a species, the conservation organization receiving the permit must meet the division designated bid for that permit.

R657-41-7. Awarding Multi-Year Conservation Permits.

(1) Distribution of multi-year conservation permits will be based on a sequential selection process where each eligible conservation organization is assigned a position or positions in the selection order among the other participating organizations and awarded credits with which to purchase multi-year permits at an assigned value. The selection process and other associated details are as follows.

(2) Multi-year permits will be awarded to eligible conservation organizations for no more than three years.

(3) The division will determine the number of permits available as multi-year permits after subtracting the proposed number of single year permits.

(a) Season types for multi-year area conservation permits for elk on any given hunt unit will be designated and assigned in the following order:

- (i) first permit -- premium;
- (ii) second permit -- any-weapon;
- (iii) third permit -- any-weapon;
- (iv) fourth permit -- archery;
- (v) fifth permit -- muzzleloader;
- (vi) sixth permit -- premium;
- (vii) seventh permit -- any-weapon; and
- (viii) eighth permit -- any-weapon.

(b) Season types for multi-year area conservation permits for deer on any given hunt unit will be designated and assigned in the following order:

- (i) first permit -- hunter choice of season;
- (ii) second permit -- hunter choice of season;
- (iii) third permit -- muzzleloader;
- (iv) fourth permit -- archery;
- (v) fifth permit -- any-weapon;
- (vi) sixth permit -- any-weapon;
- (vii) seventh permit -- muzzleloader; and
- (viii) eighth permit -- archery.

(4) The division will assign a monetary value to each multi-year permit based on the average return for the permit during the previous three year period. If a history is not available, the value will be estimated.

(5) The division will determine the total annual value of all multi-year permits.

(6)(a) The division will calculate a market share for each eligible conservation organization applying for multi-year permits.

(b) Market share will be calculated and determined based on:

(i) the conservation organization's previous three years performance;

(ii) all conservation permits (single and multi-year) issued to a conservation organization except for special permits allocated by the Wildlife Board outside the normal

allocation process.

(iii) the percent of conservation permit revenue raised by a conservation organization during the three year period relative to all conservation permit revenue raised during the same period by all conservation organizations applying for multi-year permits.

(7) The division will determine the credits available to spend by each group in the selection process based on their market share multiplied by the total annual value of all multi-year permits.

(8) The division will establish a selection order for the participating conservation organizations based on the relative value of each groups market share as follows:

(a) groups will be ordered based on their percent of market share;

(b) each selection position will cost a group 10% of the total market share except the last selection by a group will cost whatever percent a group has remaining;

(c) no group can have more than three positions in the selection order; and

(d) the selection order will be established as follows:

(i) the group with the highest market share will be assigned the first position and ten percent will be subtracted from their total market share;

(ii) the group with the highest remaining market share will be assigned the second position and ten percent will be subtracted from their market share; and

(iii) this procedure will continue until all groups have three positions or their market share is exhausted.

(9) At least two weeks prior to the multi-year permit selection meeting, the division will provide each conservation organization applying for multi-year permits the following items:

(a) a list of multi-year permits available with assigned value;

(b) documentation of the calculation of market share;

(c) credits available to each conservation group to use in the selection process;

(d) the selection order; and

(e) date, time and location of the selection meeting.

(10) Between the establishing of the selection order and the selection meeting, groups may trade or assign draw positions, but once the selection meeting begins draw order cannot be changed.

(11) At the selection meeting, conservation organizations will select permits from the available pool according to their respective positions in the selection order. For each permit selected, the value of that permit will be deducted from the conservation organization's available credits. The selection order will repeat itself until all available credits are used or all available permits are selected.

(12) Conservation organizations may continue to select a single permit each time their turn comes up in the selection order until all available credits are used or all available permits are selected.

(13) A conservation organization may not exceed its available credits except a group may select their last permit for up to 10% of the permit value above their remaining credits.

(14) Upon completion of the selection process, but prior to the Wildlife Board meeting where final assignment of permits are made, conservation organizations may trade or assign permits to other conservation organizations eligible to receive multi-year permits. The group receiving a permit retains the permit for the purposes of marketing and determination of market share for the entire multi-year period.

(15) Variances for an extended season or legal weapon choice may be obtained only on area conservation permits and must be presented to the Wildlife Board prior to the final

assignment of the permit to the conservation organization.

(16) Conservation organizations may not trade or transfer multi-year permits to other organizations once assigned by the Wildlife Board.

(17) Conservation organizations failing to comply with the reporting requirements in any given year during the multi-year period shall lose the multi-year conservation permits for the balance of the multi-year award period.

(18) If a conservation organization is unable to complete the terms of marketing the assigned permits, the permits will be returned to the regular public drawing process for the duration of the multi-year allocation period.

R657-41-8. Distributing Conservation Permits.

(1) The division and conservation organization receiving permits shall enter into a contract.

(2)(a) The conservation organization receiving permits must insure that the permits are marketed and distributed by lawful means. Conservation permits may not be distributed in a raffle except where the following conditions are met:

(i) the conservation organization obtains and provides the division with a written opinion from a licensed attorney or a written confirmation by the local district or county attorney that the raffle scheme is in compliance with state and local gambling laws;

(ii) except as otherwise provided in R657-41-8(5), the conservation organization does not repurchase, directly or indirectly, the right to any permit it distributes through the raffle;

(iii) the conservation organization prominently discloses in any advertisement for the raffle and at the location of the raffle that no purchase is necessary to participate; and

(iv) the conservation organization provides the division with a full accounting of any funds raised in the conservation permit raffle, and otherwise accounts for and handles the funds consistent with the requirement in Utah Admin. Code R657-41-9.

(3) The conservation organization must:

(i) obtain the name of the proposed permit recipient at the event where the permit recipient is selected; and

(ii) notify the division of the proposed permit recipient within 30 days of the recipient selection or the permit may be forfeited.

(4) If a person is selected by a qualified organization to receive a conservation permit and is also successful in obtaining a permit for the same species in the same year through the a division drawing, that person may designate another person to receive the conservation permit, provided the conservation permit has not been issued by the division to the first selected person.

(5) If a person is selected by a qualified organization to receive a conservation permit, but is unable to use the permit, the conservation organization may designate another person to receive the permit provided:

(a) the conservation organization selects the new recipient of the permit;

(b) the amount of money received by the division for the permit is not decreased;

(c) the conservation organization relinquishes to the division and otherwise uses all proceeds generated from the re-designated permit, pursuant to the requirements provided in Section R657-41-9;

(d) the conservation organization and the initial designated recipient of the permit, sign an affidavit indicating the initial designated recipient is not profiting from transferring the right to the permit; and

(e) the permit has not been issued by the division to the first designated person.

(6) Except as otherwise provided under Subsections (4)

and (5), a person designated by a conservation organization as a recipient of a conservation permit, may not sell or transfer the rights to that designation to any other person. This does not preclude a person from bidding or otherwise lawfully acquiring a permit from a conservation organization on behalf of another person who will be identified as the original designated recipient.

(7) A person cannot obtain more than one conservation permit for a single conservation permit species per year, except for:

(a) elk, provided no more than two permits are obtained where one or both are antlerless permits; and

(b) turkey.

(8) the person designated on a conservation permit voucher must possess or obtain a current Utah hunting or combination license to redeem the voucher for the corresponding conservation permit.

R657-41-9. Conservation Permit Funds and Reporting.

(1) All permits must be marketed by September 1, annually.

(2) Within 30 days of the last event, but no later than September 1 annually, the conservation organization must submit to the division:

(a) a final report on the distribution of permits;

(b) the total funds raised on each permit;

(c) the funds due to the division; and

(d) a report on the status of each project funded in whole or in part with retained conservation permit revenue.

(3)(a) Permits shall not be issued until the permit fees are paid to the division.

(b) If the conservation organization is paying the permit fees for the permit recipient, the fees must be paid from the 10% retained by the conservation organization as provided in Subsection (5)(a).

(4)(a) Conservation organizations shall remit to the division by September 1 of each year 30% of the total revenue generated by conservation permit sales in that year.

(b) The permit revenue payable to the division under Subsection (4)(a), excluding accrued interest, is the property of the division and may not be used by conservation organizations for projects or any other purpose.

(c) The permit revenue must be placed in a federally insured account promptly upon receipt and remain in the account until remitted to the division on or before September 1 of each year.

(d) The permit revenue payable to the division under this subsection shall not be used by the conservation organization as collateral or commingled in the same account with the organization's operation and administration funds, so that the separate identity of the permit revenue is not lost.

(e) Failure to remit 30% of the total permit revenue to the Division by the September 1 deadline may result in criminal prosecution under Title 76, Chapter 6, Part 4 of the Utah Code, and may further disqualify the conservation organization from obtaining any future conservation permits.

(5) A conservation organization may retain 70% of the revenue generated from the sale of conservation permits as follows:

(a) 10% of the revenue may be withheld and used by the conservation organization for administrative expenses.

(b) 60% of the revenue may be retained and used by the conservation organization only for eligible projects as provided in subsections (i) through (ix).

(i) eligible projects include habitat improvement, habitat acquisition, transplants, targeted education efforts and other projects providing a substantial benefit to species of wildlife for which conservation permits are issued.

(ii) retained revenue shall not be committed to or

expended on any eligible project without first obtaining the division director's written concurrence.

(iii) retained revenue shall not be used on any project that does not provide a substantial and direct benefit to conservation permit species located in Utah.

(iv) cash donations to the Wildlife Habitat Account created under Section 23-19-43, Division Species Enhancement Funds, or the Conservation Permit Fund shall be considered an eligible project and do not require the division director's approval, provided the donation is made with instructions that it be used for species of wildlife for which conservation permits are issued.

(v) funds committed to approved projects will be transferred to the division within 90 days of being committed

(A) if the project to which funds are committed is completed under the projected budget or is canceled, funds committed to the project that are not used will be kept by the division and credited back to the conservation organization and will be made available for the group to use on other approved projects during the current or subsequent year.

(vi) retained revenue shall not be used on any project that is inconsistent with division policy, including feeding programs, depredation management, or predator control.

(vii) retained revenue under this subsection must be placed in a federally insured account. All interest revenue earned thereon may be retained and used by the conservation organization for administrative expenses.

(viii) retained revenue shall not be used by the conservation organization as collateral or commingled in the same account with the organization's operation and administration funds, so that the separate identity of the retained revenue is not lost.

(ix) retained revenue must be completely expended on or committed to approved eligible projects by September 1, two years following the year in which the relevant conservation permits are awarded to the conservation organization by the Wildlife Board. Failure to commit or expend the retained revenue by the September 1 deadline will disqualify the conservation organization from obtaining any future conservation permits until the unspent retained revenue is committed to an approved eligible project.

(x) all records and receipts for projects under this subsection must be retained by the conservation organization for a period not less than five years, and shall be produced to the division for inspection upon request.

(6)(a) Conservation organizations accepting permits shall be subject to annual audits on project expenditures and conservation permit accounts.

(b) The division shall perform annual audits on project expenditures and conservation permit accounts.

R657-41-10. Obtaining Sportsman Permits.

(1) One sportsman permit is offered to residents through a drawing for each of the following species:

- (a) desert bighorn (ram);
- (b) bison (hunter's choice);
- (c) buck deer;
- (d) bull elk;
- (e) Rocky Mountain bighorn (ram)
- (f) Rocky Mountain goat (hunter's choice)
- (g) bull moose;
- (h) buck pronghorn;
- (i) black bear;
- (j) cougar; and
- (k) wild turkey.

(2) The following information on sportsman permits is provided in the proclamations of the Wildlife Board for taking protected wildlife:

- (a) hunt dates;

(b) open units or hunt areas;

(c) application procedures;

(d) fees; and

(e) deadlines.

(3) a person must possess or obtain a current Utah hunting or combination license to apply for or obtain a sportsman permit.

R657-41-11. Using a Conservation or Sportsman Permit.

(1)(a) A conservation or sportsman permit allows the recipient to take only one individual of the species for which the permit is issued, except a statewide turkey conservation or sportsman permit allows the holder to take two turkeys.

(b) The species that may be taken shall be printed on the permit.

(c) The species may be taken in the area and during the season specified on the permit.

(d) The species may be taken only with the weapon specified on the permit.

(2) The recipient of a conservation or sportsman permit is subject to all of the provisions of Title 23, Wildlife Resources Code, and the rules and proclamations of the Wildlife Board for taking and pursuing wildlife.

(3) Bonus points shall not be awarded or utilized:

(a) when applying for conservation or sportsman permits; or

(b) in obtaining conservation or sportsman permits.

(4) Any person who has obtained a conservation or sportsman permit is subject to all waiting periods as provided in Rules R657-62.

R657-41-12. Special Antelope Island State Park Conservation Permit.

(1) If the Wildlife Board authorizes a hunt for bighorn sheep or mule deer on Antelope Island State Park, one permit for each species will be made available as a Special Antelope Island State Park Conservation Permit.

(2) Special Antelope Island State Park Conservation Permits will be issued for one year.

(3) Special Antelope Island State Park Conservation Permits will be issued under this section and will not be limited by the requirements of R657-41-3 through R657-41-8.

(4) Special Antelope Island State Park Conservation Permits will be provided to the conservation group awarded the wildlife expo permit series as provided in R657-55 for marketing at the wildlife exposition where the wildlife expo permits are awarded.

(5) The division and conservation organization receiving Special Antelope Island State Park Conservation Permits shall enter into a contract

(6) The conservation organization receiving Special Antelope Island State Park Conservation Permits must insure that the permits are marketed and distributed by lawful means.

(7) The conservation organization must:

(a) obtain the name of the proposed permit recipient at the event where the permit recipient is selected; and

(b) notify the division of the proposed permit recipient within 10 days of the recipient selection or the permit may be forfeited.

(8) If a person is selected by a qualified organization to receive a Special Antelope Island State Park Conservation Permit and is also successful in obtaining a permit for the same species in the same year through a division drawing, that person may designate another person to receive the Special Antelope Island State Park Conservation Permit, provided the permit has not been issued by the division to the first selected person.

(9) If a person is selected by a qualified organization to receive a Special Antelope Island State Park Conservation Permit, but is unable to use the permit, the conservation organization may designate another person to receive the permit provided:

- (a) the conservation organization selects the new recipient of the permit;
- (b) the amount of money received by the division for the permit is not decreased;
- (c) the conservation organization relinquishes to the division and otherwise uses all proceeds generated from the re-designated permit, pursuant to the requirements provided below:
 - (i) the conservation organization and the initial designated recipient of the permit, sign an affidavit indicating the initial designated recipient is not profiting from transferring the right to the permit; and
 - (ii) the permit has not been issued by the division to the first designated person.

(10) Except as otherwise provided under Subsections (8) and (9), a person designated by a conservation organization as a recipient of a Special Antelope Island State Park Conservation Permit, may not sell or transfer the rights to that designation to any other person. This does not preclude a person from bidding or otherwise lawfully acquiring a permit from a conservation organization on behalf of another person who will be identified as the original designated recipient.

(11) A person cannot obtain a Special Antelope Island State Park Conservation Permit for a bighorn sheep or mule deer and any other permit for a male animal of the same species in the same year.

(12) The person designated to receive a Special Antelope Island State Park Conservation Permit must possess or obtain a current Utah hunting or combination license before being issued the permit.

(13) Within 30 days of the wildlife exposition, but no later than May 1 annually, the conservation organization must submit to the division:

- (a) a final report on the distribution of the Special Antelope Island State Park Conservation Permits;
- (b) the total funds raised on each permit; and
- (c) the funds due to the division.

(14)(a) Permits shall not be issued until the permit fees are paid to the division.

(b) If the conservation organization is paying the permit fees for the permit recipient, the fees must be paid from the 10% retained by the conservation organization as provided in R657-41-9(5)(a).

(15)(a) Conservation organizations shall remit to the division 90% of the total revenue generated by the Special Antelope Island State Park Conservation Permit sales in that year.

(b) Failure to remit 90% of the total permit revenue to the division by the September 1 deadline may result in criminal prosecution under Title 76, Chapter 6, Part 4 of the Utah Code.

(16) A conservation organization may retain 10% of the revenue generated by the permits for administrative expenses.

(17) Upon receipt of the permit revenue from the conservation organization, the division will transfer the revenue in its entirety to the Division of Parks and Recreation as provided in a cooperative agreement between the two divisions.

conservation permit vouchers.

KEY: wildlife, wildlife permits, sportsmen, conservation permits

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23-14-18

23-14-19

R657-41-13. Failure to Comply.

Any conservation organization administratively or criminally found in violation of this rule or the Wildlife Resources Code may be suspended from participation in the conservation permit program and required to surrender all

R657. Natural Resources, Wildlife Resources.**R657-42. Fees, Exchanges, Surrenders, Refunds and Reallocation of Wildlife Documents.****R657-42-1. Purpose and Authority.**

(1) Under the authority of Sections 23-19-1 and 23-19-38 the division may issue wildlife documents in accordance with the rules of the Wildlife Board.

(2) This rule provides the standards and procedures for the:

- (a) exchange of permits;
- (b) surrender of wildlife documents;
- (c) refund of wildlife documents;
- (d) reallocation of permits; and
- (e) assessment of late fees.

R657-42-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2 and the applicable rules and guidebooks of the Wildlife Board.

(2) In addition:

(a) "Alternate drawing lists" means a list of persons who have not already drawn a permit and would have been the next person in line to draw a permit.

(b) "CWMU" means cooperative wildlife management unit.

(c) "Deployed or mobilized" means that a person provides military or emergency services in the interest of national defense or national emergency pursuant to the demand, request or order of their employer.

(d) "General season permit" means any:

(i) bull elk, buck deer, or turkey permit identified in the guidebooks of the Wildlife Board as a general season permit;

(ii) antlerless permit for elk, deer, or pronghorn antelope; or

(iii) harvest objective cougar permit.

(e) "Landowner association operator" for purposes of this rule, means:

(i) a landowner association or any of its members eligible to receive limited entry landowner permits as provided in Rule R657-43; or

(ii) CWMU - landowner association or its designated operator as provided in Rule R657-37.

(f) "Limited entry permit" means any permit, including a CWMU, conservation, expo, sportsman, or limited entry landowner permit, identified in the guidebooks of the Wildlife Board as limited entry or premium limited entry for the following:

(i) bull elk, buck deer, buck pronghorn, bear, cougar, or turkey; and

(ii) antlerless moose.

(g) "Once-in-a-lifetime permit" means any permit, including a CWMU, conservation, expo, sportsman, or limited entry landowner permit, identified in the guidebooks of the Wildlife Board as once-in-a-lifetime for the following:

(i) bison, bull moose, Rocky Mountain goat, desert bighorn sheep, and Rocky Mountain bighorn sheep.

(h) "Wildlife document" means any license, permit, tag, or certificate of registration issued by the division.

R657-42-3. Exchanges.

(1)(a) Any person who has obtained a general buck deer or a general bull elk permit may exchange that permit for any other available general permit if both permits are for the same species and sex.

(b) A person must make general buck deer and general bull elk permit exchanges at any division office prior to the season opening date of the permit to be exchanged.

(2) Any person who has obtained a cougar harvest objective unit permit may exchange that permit for any other

available cougar harvest objective unit permit as provided in Rule R657-10.

(3) Any person who has obtained a limited entry bear any weapon or limited entry bear archery permit may exchange that permit for a limited entry bear archery or limited entry bear any weapon permit, respectively.

(4) The division may charge a handling fee for the exchange of a permit.

R657-42-4. Surrenders.

(1) Any person who has obtained a wildlife document and decides not to use it, may surrender the wildlife document to any division office.

(2) Any person who has obtained a wildlife document may surrender the wildlife document prior to the season opening date of the wildlife document for the purpose of:

(a) waiving the waiting period normally assessed and reinstating the number of bonus points, including a bonus point for the current year as if a permit had not been drawn, if applicable;

(b) reinstating the number of preference points, including a preference point for the current year as if a permit had not been drawn, if applicable;

(c) purchasing a reallocated permit or any other permit available for which the person is eligible; or

(d) receiving a refund as provided in R657-42-5.

(3) A CWMU permit must be surrendered prior to the applicable season opening date provided by the CWMU operator, except as provided in Section R657-42-11.

(4) Dedicated hunter participants must surrender their permits prior to the general archery deer season, except as provided in Section R657-38-6.

(5) A person may surrender a limited-entry, or once-in-a-lifetime permit received through a group application in the Big Game drawing and have their bonus points for that permit species reinstated, provided;

(a) all group members surrender their permits; and

(b) all permits are surrendered to the division more than 30 days before the start of the season for which the permit is valid.

(6) A person may surrender a general season permit received through a group application in the Big Game drawing and have their preference points reinstated, provided;

(a) all members of the group surrender their permits to the division prior to the start of the season for which the permit is valid.

(7) Notwithstanding Subsections (5)(b) and (6)(a), a person who obtains a permit through a group application in the Big Game drawing may surrender that permit after the opening date of the applicable hunting season and have the bonus points for the permit species restored, provided the person;

(a) is a member of United States Armed Forces or public health or public safety organization and is deployed or mobilized in the interest of national defense or national emergency;

(b) surrenders the permit to the division, with the tag attached and intact, or signs an affidavit verifying the permit is no longer in their possession within one year of the end of hunting season authorized by the permit; and

(c) satisfies the requirements for receiving a refund in R657-42-5(3)(c) and (d).

(8) The division may not issue a refund, except as provided in Sections 23-19-38, 23-19-38.2, and R657-42-5.

R657-42-5. Refunds.

(1) The refund of a license, certificate of registration or permit shall be made in accordance with:

(a) Section 23-19-38 and Rule R657-50;

- (b) Section 23-19-38.2 and Subsection (3); or
- (c) Section 23-19-38 and this section.

(2)(a) An application for a refund may be obtained from any division office.

(b) All refunds must be processed through the Salt Lake Division office.

(3) A person may receive a refund for a wildlife document if that person was deployed or mobilized on or after September 11, 2001, in the interest of national defense or national emergency and is thereby completely precluded from participating in the hunting or fishing activity authorized by the wildlife document, provided:

(a) the refund request is made to the division within one year of the end of the hunting or fishing season authorized by the wildlife document;

(b) the person surrenders the wildlife document to the division, or signs an affidavit stating the wildlife document is no longer in the person's possession; and

(c) the person verifies that the deployment or mobilization completely precluded them from participating in the activity authorized by the wildlife document; and

(d) the person provides military orders, or a letter from an employment supervisor on official public health or public safety organization letterhead stating:

(i) the branch of the United States Armed Forces, or name of the public health organization or public safety organization from which they were deployed or mobilized; and

(ii) the nature and length of their duty while deployed or mobilized.

(4) The division may issue a refund for a wildlife document if the person to whom it was issued dies prior to participating in the hunting or fishing activity authorized by the wildlife document, provided:

(a) The person legally entitled to administer the decedent's estate provides the division with:

(i) picture identification;

(ii) letters testamentary, letters of administration, or such other evidence establishing the person is legally entitled to administer the affairs of the decedent's estate;

(iii) a photocopy of the decedent's certified death certificate; and

(iv) the wildlife document for which a refund is requested.

(5)(a)(i) A person may receive a refund for a once-in-a-lifetime or limited-entry permit provided the permit is surrendered to the division no less than 30 days prior to the season opening date identified on the permit

(ii) A person may receive a refund for a general season permit that must be surrendered in order to accept a reallocated limited entry permit for the same species.

(b)(i) The established wildlife document refund fee shall be deducted from all refunds under subsection (5)(a).

(ii) A refund will not be issued where the wildlife document purchase price is equal to or less than the wildlife document refund fee.

(6) The director may determine that a person did not have the opportunity to participate in an activity authorized by the wildlife document.

(7) The division may reinstate a bonus point or preference point, whichever is applicable, and waive waiting periods, if applicable, when issuing a refund in accordance with this Section.

R657-42-6. Reallocation of Permits.

(1)(a) The division may reallocate surrendered limited entry and once-in-a-lifetime permits.

(b) The division shall not reallocate general season permits for big game and turkey, but the number of permits

surrendered may be added to the appropriate permit quota the following year.

(2) Permits shall be reallocated through the Salt Lake Division office.

(3)(a) Any limited entry, once-in-a-lifetime or public CWMU permit surrendered to the division shall be reallocated through the drawing process by contacting the next person listed on the alternate drawing list or as provided in Subsection (b).

(b) A person who is denied a permit due to an error in issuing permits may be placed on the alternate drawing list to address the error, if applicable, in accordance with the Rule R657-50.

(c) The alternate drawing lists are classified as private and therefore, protected under the Government Records Access Management Act.

(d) The division shall make a reasonable effort to contact the next person on the alternate list by telephone or mail.

(e) If the next person, who would have drawn the limited entry, once-in-a-lifetime or public CWMU permit, does not accept the permit or the division is unable to contact that person, the reallocation process will continue until the division has reallocated the permit or the season closes for that permit.

(4) If the next person, who would have drawn the limited entry, once-in-a-lifetime or public CWMU permit has obtained a permit, that person may be required to surrender the previously obtained permit in accordance with Section R657-42-4(2) and any other applicable rules and guidebooks of the Wildlife Board.

(5) Any private CWMU permit surrendered to the division will be reallocated by the landowner through a voucher, issued to the landowner by the division in accordance with Rule R657-37.

R657-42-7. Reallocated Permit Cost.

(1) Any person who accepts the offered reallocated permit must pay the applicable permit fee.

(2) The division may not issue a refund, except as provided in Section R657-42-5.

R657-42-8. Accepted Payment of Fees.

(1) Personal checks, business checks, money orders, cashier's checks, and credit or debit cards are accepted for payment of wildlife documents.

(2) Personal or business checks drawn on an out-of-state account are not accepted.

(3) Third-party checks are not accepted.

(4) All payments must be made payable to the Utah Division of Wildlife Resources.

(5)(a) Credit or debit cards must be valid at least 30 days after any drawing results are posted.

(b) Checks, and credit or debit cards will not be accepted as combined payment on single or group applications.

(c) If applicants are applying as a group, all fees for all applicants in that group charged to a credit or debit card must be charged to a single card.

(d) Handling fees and donations are charged to the credit or debit card when the application is processed.

(e) Application amendment fees must be paid by credit or debit card.

(f) Permit fees may be charged to the credit or debit card prior to the posting date of the drawings, if successful.

(g) The division shall not be held responsible for bank charges incurred for the use of credit or debit cards.

(6)(a) An application is voidable if the check is returned unpaid from the bank or the credit or debit card is invalid or

refused.

(b) The division charges a returned check collection fee for any check returned unpaid.

(7)(a) A license or permit is voidable if the check is returned unpaid from the bank or the credit or debit card is invalid or refused.

(b) The Division may make attempt to contact the successful applicant by phone or mail to collect payment prior to voiding the license or permit.

(8)(a) A license or permit received by a person shall be deemed invalid if payment for that license or permit is not received, or a check is returned unpaid from the bank, or the credit or debit card is invalid or refused.

(b) A person must notify the division of any change of credit or debit card numbers if the credit or debit card is invalid or refused.

(9) Hunting with a permit where payment has not been received for that permit constitutes a violation of hunting without a valid permit.

(10) The division may require a money order or cashier's check to correct payment for a license, permit, or certificate of registration.

(11) Any person who fails to pay the required fee for any wildlife document, shall be ineligible to obtain any other wildlife document until the delinquent fees and associated collection costs are paid.

(12) The Division may take any of the following actions when a wildlife document is voided for nonpayment or remains unissued and unpaid;

(a) reissue the wildlife document using the alternate drawing list for that document;

(b) reissue the wildlife document over-the-counter; or

(c) elect to withhold the wildlife document from reissuance.

(13) The Division may reinstate the applicant's bonus points or preference points and waive waiting periods, where applicable, when:

(a) voiding a permit in accordance with this section and the permit is reallocated;

(b) withholding a wildlife document from a successful applicant for nonpayment and the permit is reallocated; or

(c) full payment is received by the successful applicant on a voided or withheld wildlife document that is not reallocated.

R657-42-9. Assessment of Late Fees.

(1) Any wildlife application submitted under the Utah Administrative Code Rules provided in Subsection (a) through (e), within 30 days of the applicable application deadline established in such rules, in the guidebooks of the Wildlife Board, or by the division may be processed only upon payment of a late fee as provided by the approved fee schedule.

(a) R657-52, Commercial Harvesting of Brine Shrimp and Brine Shrimp Eggs;

(b) R657-21, Cooperative Wildlife Management Units for Small Game;

(c) R657-22, Commercial Hunting Areas;

(d) R657-37, Cooperative Wildlife Management Units for Big Game; or

(e) R657-43, Landowner Permits.

(2) Any person who fails to report their Big Game hunt information pursuant to R657-5 Taking Big Game, within 30 calendar days of the ending season date for their once-in-a-lifetime, premium limited entry, limited entry, or cooperative wildlife management unit hunt may apply for a Big Game permit or bonus point in the following year provided:

(a) the survey is completed and submitted to the division at least 5 days prior to the close of the Big Game application

period established in the guidebook of the Wildlife Board for taking big game.

(b) the late fee established in the approved fee schedule is paid to the Division through the 1-800 number listed in the guidebooks of the Wildlife Board for taking big game.

(c) The accepted method of payment of fee is only a credit or debit card.

(3) Any person who fails to report their Swan hunt information pursuant to R657-9-7, within 30 calendar days of the ending season date for their Swan hunt may apply for a Swan permit in the following year provided:

(a) the survey is completed and submitted to the division at least 5 days prior to the close of the Swan application period established in the guidebook of the Wildlife Board for taking waterfowl.

(b) the late fee established in the approved fee schedule is paid to the Division through the 1-800 number listed in the guidebook of the Wildlife Board for taking waterfowl or through the division website.

(c) The accepted method of payment of fee is only a credit or debit card.

R657-42-10. Duplicates.

(1) If an unexpired wildlife document is destroyed, lost or stolen, a person may obtain a duplicate from a division office or online license agent, for a duplicate fee as provided in the fee schedule.

(2) The division may waive the fee for a duplicate unexpired wildlife document provided the person did not receive the original wildlife document.

(3) To obtain the duplicate wildlife document, the applicant may be required to complete an affidavit testifying to such loss, destruction or theft.

R657-42-11. Surrender of Cooperative Wildlife Management Unit or Limited Entry Landowner Permits.

(1) A person who has obtained a CWMU or limited entry landowner permit may surrender the permit after the deadline provided in Subsection R657-42-4(3) for CWMU permits and after the season opening date for limited entry landowner permits for the purpose of:

(a) death in accordance with Section 23-19-38, Subsection (2) and Section R657-42-5(4);

(b) injury or illness in accordance with Section 23-19-38 and Subsection (2);

(c) deployment or mobilization in the interest of national defense or national emergency in accordance with Section 23-19-38.2 and Subsection (2); or

(d) an error occurring in issuing the permit in accordance with Subsection (2) and Rule R657-50.

(2)(a) The permittee and the landowner association operator must sign an affidavit stating that the permittee has not participated in any hunting activity.

(b) The permittee and landowner association operator signatures must be notarized.

(c) The affidavit and unused permit must be submitted to the division.

(3)(a) The division may reissue a voucher to a landowner association operator, or reallocate a surrendered permit in accordance with Section 23-19-38 and as provided in Subsections (b) and (c).

(b) The division may reallocate a surrendered permit:

(i) originally issued by the division through the big game drawing process in accordance with Section R657-42-6; or

(ii) originally issued by the division through a voucher redemption in the form of a new voucher issued to the landowner association operator.

(c) Reissuance of vouchers or reallocation of permits

under this section may only occur in the year in which the surrendered permit was valid.

KEY: wildlife, permits

March 16, 2015

Notice of Continuation May 6, 2013

23-19-1

23-19-38

23-19-38.2

R657. Natural Resources, Wildlife Resources.**R657-55. Wildlife Expo Permits.****R657-55-1. Purpose and Authority.**

(1) Under the authority of Sections 23-14-18 and 23-14-19 of the Utah Code, this rule provides the standards and requirements for issuing wildlife expo permits.

(2) Wildlife expo permits are authorized by the Wildlife Board and issued by the division to a qualified conservation organization for purposes of generating revenue to fund wildlife conservation activities in Utah and attracting a regional or national wildlife exposition to Utah.

(3) The selected conservation organization will conduct a random drawing at an exposition held in Utah to distribute the opportunity to receive wildlife expo permits.

(4) This rule is intended as authorization to issue one series of wildlife expo permits per year to one qualified conservation organization.

R657-55-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "Conservation organization" means a nonprofit chartered institution, corporation, foundation, or association founded for the purpose of promoting wildlife conservation.

(b) "Special nonresident expo permit" means one wildlife expo permit for each once-in-a-lifetime species that is only available to a nonresident hunter legally eligible to hunt in Utah.

(c) "Wildlife exposition" means a multi-day event held within the state of Utah that is sponsored by multiple wildlife conservation organizations as their national or regional convention or event that is open to the general public and designed to draw nationwide attendance of more than 10,000 individuals. The wildlife exposition may include wildlife conservation fund raising activities, outdoor exhibits, retail marketing of outdoor products and services, public awareness programs, and other similar activities.

(d) "Wildlife exposition audit" means an annual review by the division of the conservation organization's processes used to handle applications for expo permits and conduct the drawing, and the protocols associated with collecting and using client data.

(e) "Wildlife expo permit" means a permit which:

(i) is authorized by the Wildlife Board to be issued to successful applicants through a drawing or random selection process conducted at a Utah wildlife exposition; and

(ii) allows the permittee to hunt the designated species on the designated unit during the respective season for each species as authorized by the Wildlife Board.

(f) "Wildlife expo permit series" means a single package of permits to be determined by the Wildlife Board for:

- (i) deer;
- (ii) elk;
- (iii) pronghorn;
- (iv) moose;
- (v) bison;
- (vi) rocky mountain goat;
- (vii) desert bighorn sheep;
- (viii) rocky mountain bighorn sheep;
- (ix) wild turkey;
- (x) cougar; or
- (xi) black bear.

(g) "Secured opportunity" means the opportunity to receive a specified wildlife expo permit that is secured by an eligible applicant through the exposition drawing process.

(h) "Successful applicant" means an individual selected to receive a wildlife expo permit through the drawing process.

R657-55-3. Wildlife Expo Permit Allocation.

(1) The Wildlife Board may allocate wildlife expo permits by May 1 of the year preceding the wildlife exposition.

(2) Wildlife expo permits shall be issued as a single series to one conservation organization.

(3) The number of wildlife expo permits authorized by the Wildlife Board shall be based on:

(a) the species population trend, size, and distribution to protect the long-term health of the population;

(b) the hunting and viewing opportunity for the general public, both short and long term; and

(c) a percentage of the permits available to nonresidents in the annual big game drawings matched by a proportionate number of resident permits.

(4) Wildlife expo permits, including special nonresident expo permits, shall not exceed 200 total permits.

(5) Wildlife expo permits designated for the exposition each year shall be deducted from the number of public drawing permits.

R657-55-4. Obtaining Authority to Distribute Wildlife Expo Permit Series.

(1)(a) Except as provided in Subsection (b), the wildlife expo permit series is issued for a period of five years.

(b) For expo contracts governing the 2017 expo, and all expo contracts thereafter, the original five year term may be extended an additional period not to exceed five years, so long as:

(i) the division and conservation organization mutually agree in writing to an extension; and

(ii) the contract extension is approved by the Wildlife Board.

(2) The wildlife expo permit series is available to eligible conservation organizations for distribution through a drawing or other random selection process held at a wildlife exposition in Utah open to the public.

(3) Conservation organizations may apply for the wildlife expo permit series by sending an application to the division between August 1 and September 1 of the year preceding the expiration of each wildlife exposition term, as provide in R657-55-4(1).

(4) Each application must include:

(a) the name, address and telephone number of the conservation organization;

(b) a description of the conservation organization's mission statement;

(c) the name of the president or other individual responsible for the administrative operations of the conservation organization; and

(d) a detailed business plan describing how the wildlife exposition will take place and how the wildlife expo permit drawing procedures will be carried out.

(5) An incomplete or incorrect application may be rejected.

(6) The division shall recommend to the Wildlife Board which conservation organization may receive the wildlife expo permit series based on:

(a) the business plan for the wildlife exposition and drawing procedures contained in the application; and

(b) the conservation organization's, including its constituent entities, ability, including past performance in marketing conservation permits under Rule R657-41, to effectively plan and complete the wildlife exposition.

(7) The Wildlife Board shall make the final assignment of the wildlife expo permit series based on the:

(a) division's recommendation;

(b) applicant conservation organization's commitment to use expo permit handling fee revenue to benefit protected

wildlife in Utah;

(c) historical contribution of the applicant conservation organization, including its constituent entities, to the conservation of wildlife in Utah; and

(d) previous performance of the applicant conservation organization, including its constituent entities.

(8) The conservation organization receiving the wildlife expo permit series must:

(a) require each wildlife expo permit applicant to possess a current Utah hunting or combination license before applying for a wildlife expo permit;

(b) select successful applicants for wildlife convention permits by drawing or other random selection process in accordance with law, provisions of this rule, proclamation, and order of the Wildlife Board;

(c) allow applicants to apply for wildlife expo permits without purchasing admission to the wildlife exposition;

(d) notify the division of the successful applicant of each wildlife expo permit within 10 days of the applicant's selection;

(e) maintain records demonstrating that the drawing was conducted fairly; and

(f) submit to an annual wildlife exposition audit by a division appointed auditor.

(9) The division shall issue the appropriate wildlife expo permit to the designated successful applicant after:

(a) completion of the random selection process;

(b) verification of the recipient being eligible for the permit; and

(c) payment of the appropriate permit fee is received by the division.

(10) The division and the conservation organization receiving the wildlife expo permit series shall enter into a contract, including the provisions outlined in this rule.

(11) If the conservation organization awarded the wildlife expo permit series withdraws before the end of the 5 year period or any extension period under R657-55-4(1)(b), any remaining co-participant with the conservation organization may be given an opportunity to assume the contract and to distribute the expo permit series consistent with the contract and this rule for the remaining years in the applicable period, provided:

(a) The original contracted conservation organization submits a certified letter to the division identifying that it will no longer be participating in the exposition.

(b) The partner or successor conservation organization files an application with the division as provided in Subsection (4) for the remaining period.

(c) The successor conservation organization submits its application request at least 60 days prior to the next scheduled exposition so that the wildlife board can evaluate the request under the criteria in this section.

(d) The Wildlife Board authorizes the successor conservation organization to assume the contract and complete the balance of the expo permit series period.

(12) The division may suspend or terminate the conservation organization's authority to distribute wildlife expo permits at any time during the original five year award term or any extension period for:

(a) violating any of the requirements set forth in this rule or the contract; or

(b) failing to bring or organize a wildlife exposition in Utah, as described in the business plan under R657-55-4(4)(d), in any given year.

R657-55-5. Wildlife Expo Permit Application Procedures.

(1) Any person legally eligible to hunt in Utah may apply for a wildlife expo permit, except that only a nonresident of Utah may apply for a special nonresident expo

permit.

(2) Any handling fee assessed by the conservation organization to process applications shall not exceed \$5 per application submitted.

(3)(a) Except as provided in Subsection (3)(b), applicants must validate their application in person at the wildlife exposition to be eligible to participate in the wildlife expo permit drawing.

(i) No person may submit an application in behalf of another.

(ii) A person may validate their wildlife expo permit application at the exposition without having to enter the exposition and pay the admission charge.

(b) An applicant that is a member of the United States Armed Forces and unable to attend the wildlife exposition as a result of being deployed or mobilized in the interest of national defense or a national emergency is not required to validate their application in person; provided exposition administrators are furnished a copy of the written deployment or mobilization orders and the orders identify:

(i) the branch of the United States Armed forces from which the applicant is deployed or mobilized;

(ii) the location where the applicant is deployed or mobilized;

(iii) the date the applicant is required to report to duty; and

(iv) the nature and length of the applicant's deployment or mobilization.

(c) The conservation organization shall maintain a record, including copies of military orders, of all applicants that are not required to validate their applications in person pursuant to Subsection (3)(b), and submit to a division audit of these records as part of its annual audit under R657-55-4(8)(f).

(4) Applicants may apply for each individual hunt for which they are eligible.

(5) Applicants may apply only once for each hunt, regardless of the number of permits for that hunt.

(6) Applicants must submit an application for each desired hunt.

(7) Applicants must possess a current Utah hunting or combination license in order to apply for a wildlife expo permit.

(8) The conservation organization shall advertise, accept, and process applications for wildlife expo permits and conduct the drawing in compliance with this rule and all other applicable laws.

R657-55-6. Drawing Procedures.

(1) A random drawing or selection process must be conducted for each wildlife expo permit.

(2) Preference and bonus points are neither awarded nor applied in the drawings.

(3) Waiting periods do not apply, except any person who obtains a wildlife expo permit for a once-in-a-lifetime species is subject to the once-in-a-lifetime restrictions applicable to obtaining a subsequent permit for the same species through a division application and drawing process, as provided in Rule R657-5 and the proclamation of the Wildlife Board for taking big game.

(4) No predetermined quotas or restrictions shall be imposed in the application or selection process for wildlife expo permits between resident and nonresident applicants, except that special nonresident expo permits may only be awarded to a nonresident of Utah.

(5) Drawings will be conducted within five days of the close of the exposition.

(6) Applicants do not have to be present at the drawing to be awarded a wildlife expo permit.

(7) The conservation organization shall identify all eligible alternates for each wildlife expo permit and provide the division with a finalized list. This list will be maintained by the conservation organization until all permits are issued.

(8) The division shall contact successful applicants by phone or mail, and the conservation organization shall post the name of all successful applicants on a designated website.

R657-55-7. Issuance of Permits.

(1) The division shall provide a wildlife expo permit to the successful applicant, as designated by the conservation organization.

(2) The division must provide a wildlife expo permit to each successful applicant, except as otherwise provided in this rule.

(3) The division shall provide each successful applicant a letter indicating the permit secured in the drawing, the appropriate fee owed the division, and the date the fee is due.

(4)(a) Successful applicants must provide the permit fee payment in full to the division.

(b) Subject to the limitation in Subsection (8), the division will issue the designated wildlife expo permit to the applicant.

(5) Residents will pay resident permit fees and nonresidents will pay nonresident permit fees.

(6) Applicants are eligible to obtain only one permit per species, except as provided in Rule R657-5, but no restrictions apply on obtaining permits for multiple species.

(7) If an applicant is selected for more than one expo permit for the same species, the division will contact the applicant to determine which permit the applicant selects.

(a) The applicant must select the permit of choice within five days of receiving notification.

(b) If the division is unable to contact the applicant within 5 days, the division will issue to the applicant the permit with the most difficult drawings odds based on drawing results from the division's big game drawing for the preceding year.

(c) Permits not issued to the applicant will go to the next person on the alternate drawing list for that permit.

(8) Any successful applicant who fails to satisfy the following requirements will be ineligible to receive the wildlife expo permit and the next drawing alternate for that permit will be selected:

(a) The applicant fails to return the appropriate permit fee in full by the date provided in Subsection (3);

(b) The applicant does not possess a valid Utah hunting or combination license at the time the expo permit application was submitted and the permit received; or

(c) The applicant is legally ineligible to possess the permit.

R657-55-8. Surrender or Transfer of Wildlife Expo Permits.

(1)(a) A person selected to receive a wildlife expo permit that is also successful in obtaining a Utah limited entry permit for the same species in the same year or successful in obtaining a general permit for a male animal of the same species in the same year, may not possess both permits and must select the permit of choice.

(b) In the event a secured opportunity is willingly surrendered before the permit is issued, the next eligible applicant on the alternate drawing list will be selected to receive the permit.

(c) In the event the wildlife expo permit is surrendered, the next eligible applicant on the alternate drawing list for that permit will be selected to receive it, and the permit fee may be refunded, as provided in Sections 23-19-38, 23-19-38.2, and R657-42-5.

(2) A person selected by a conservation organization to receive a wildlife expo permit, may not sell or transfer the permit, or any rights thereunder to another person in accordance with Section 23-19-1.

(3) If a person is successful in obtaining a wildlife expo permit but is legally ineligible to hunt in Utah, the next eligible applicant on the alternate drawing list for that permit will be selected to receive it.

R657-55-9. Using a Wildlife Expo Permit.

(1) A wildlife expo permit allows the recipient to:

(a) take only the species for which the permit is issued;

(b) take only the species and sex printed on the permit;

(c) take the species only in the area and during the season specified on the permit; and

(d) take the species only with the weapon type specified on the permit.

(2) The recipient of a wildlife expo permit is subject to all of the provisions of Title 23, Wildlife Resources Code, and the rules and proclamations of the Wildlife Board for taking and pursuing wildlife.

R657-55-10. Wildlife Expo Permit -- Application Fee Revenue.

(1) All wildlife expo permit, application fee revenue generated by the conservation organization under R657-55-5(2) will be deposited in a separate, federally insured account to prevent commingling with any other funds.

(a) All interest earned on application fee revenue may be retained and used by the conservation organization for administrative expenses.

(2) The conservation organization may retain up to \$3.50 of each \$5.00 application fee for administrative expenses.

(3) The remaining balance of each \$5.00 application fee will be used by the conservation organization to fund projects advancing wildlife interests in the state, subject to the following:

(a) project funding will not be committed to or expended on any project without first obtaining the division director's written approval;

(b) cash donations to the Wildlife Habitat Account created under Section 23-19-43 or Division Species Enhancement Funds are authorized projects that do not require the division director's approval; and

(c) application fee revenue dedicated to funding projects must be completely expended on or committed to approved projects by September 1st, two years following the year in which the application fee revenue is collected, unless otherwise authorized in writing by the division director.

(4) All records and receipts for projects under Subsection (3) must be retained by the conservation organization for a period not less than five years, and shall be produced to the division for inspection upon request.

(5) The conservation organization shall submit a report to the division and Wildlife Board each year no later than September 1st that accounts for and documents the following:

(a) gross revenue generated from collecting \$5 wildlife expo permit application fees;

(b) total amount of application fee revenue retained for administrative expenses;

(c) total amount of application fee revenue set aside and dedicated to funding projects; and

(d) description of each project funded with application fee revenue, including the date of funding, the amount of funding contributed, and the completion status of the project.

(6) An organization that individually receives application fee revenue from the expo permit drawing pursuant to a co-participant contract with the conservation

organization, is subject to the provisions in Subsections (1) through (5).

KEY: wildlife, wildlife permits

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Notice of Continuation May 26, 2010

23-14-18

23-14-19

R657. Natural Resources, Wildlife Resources.**R657-57. Division Variance Rule.****R657-57-1. Purpose and Authority.**

(1) Under authority of Sections 23-14-18 and 23-14-19 this rule is established to provide authority, standards and procedures for granting remedial relief to persons precluded from obtaining or using a wildlife document because of an event or condition beyond their control.

R657-57-2. Definitions.

(1) The terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "CWMU" means cooperative wildlife management unit, as defined in Section 23-23-2;

(b) "Event or condition" means a circumstance in a person's life beyond their control that precludes or substantially limits their ability to obtain or use a wildlife document;

(c) "Harvesting" means, for purposes of this rule, killing an animal;

(d) "Hunt day" means spending any time in the field hunting the permitted animal species in a single day, during lawful hunting hours, and within the prescribed season;

(e) "Immediate family member" means a person's spouse, child, stepchild, grandchild, brother, sister, parent, stepparent, grandparent, mother-in-law, or father-in-law;

(f)(i) "Limited entry hunt" means any hunt identified in the proclamations and guidebooks of the Wildlife Board as:

(A) a premium limited entry or limited entry hunt; and

(B) that awards a bonus point to unsuccessful permit applicants pursuant to R657-62-8.

(ii) "Limited entry hunt" further includes antlerless moose hunts and CWMU hunts available to the public through a Division administered drawing.

(g) "Once-in-a-lifetime hunt" means any hunt for which a wildlife document is issued to take a bull moose, bighorn sheep, bison, or mountain goat.

(h) "Substantially precluded" means participating in no more than one hunt day during the prescribed hunting season because of a qualifying event or condition set forth in R657-57-6.

(i) "Variance" means remedial relief granted by the Division or Wildlife Board to restore a person's opportunity to obtain or use a wildlife document which is completely lost or substantially impaired because of an intervening event or condition; and

(j) "Wildlife document" means any license, permit, tag, certificate of registration, or wildlife permit voucher issued by the Division.

R657-57-3. Division Variance Authority.

(1) The Division may issue variances to qualified individuals, subject to the standards, limitations, requirements, and procedures in this rule.

R657-57-4. Division Variance Authority Scope.

(1)(a) The Division may grant a season extension variance extending the hunting season on an applicant's wildlife document to the same or substantially similar hunt in the following year, provided:

(i) the variance request involves a wildlife document for a:

(A) once-in-a-lifetime hunt under R657-5;

(B) conservation permit hunt under R657-41;

(C) limited entry landowner permit hunt under R657-43;

(D) poaching-reported reward permit hunt under R657-5; or

(E) CWMU hunt obtained through the operator or

landowner under R657-37-9.

(ii) the applicant was substantially precluded during the prescribed hunting season from using a wildlife document because of a qualifying event or condition set forth in R657-57-6; and

(A) the qualifying event or condition was not the result of the applicant's willful misconduct or gross negligent acts or omissions; and

(B) the applicant was unsuccessful in harvesting an animal for which the wildlife document was issued; and

(iii) the season extension occurs the following year and is restricted to the same species, gender, unit, weapon type, and season as the original wildlife document;

(iv) any changes in unit descriptions and season dates in the extension year are applied; and

(v) the variance is otherwise requested and issued in compliance with the standards, requirements and procedures set forth in this rule.

(b) Any waiting period associated with a wildlife document for which a season extension variance is granted begins on the date the original wildlife document is obtained.

(2)(a) The Division may grant a variance by restoring forfeited bonus points and waiving an incurred waiting period, provided:

(i) the variance request involves a wildlife document for a:

(A) limited entry hunt or once-in-a-lifetime hunt; or

(B) any other hunt that triggers a waiting period to participate in a Division administered drawing;

(ii) the applicant was substantially precluded during the prescribed hunting season from using a wildlife document because of a qualifying event or condition set forth in R657-57-6; and

(A) the qualifying event or condition was not the result of the applicant's willful misconduct or gross negligent acts or omissions; and

(B) the applicant was unsuccessful in harvesting an animal for which the wildlife document was issued; and

(iii) the variance is otherwise requested and issued in compliance with the standards, requirements and procedures set forth in this rule.

(b) The Division may not restore a bonus point on a wildlife document that did not cause a bonus point forfeiture.

(3)(a) The Division may grant a variance by restoring forfeited preference points, provided:

(i) the variance request involves a wildlife document obtained through a Division administered drawing and for which preference points are awarded to unsuccessful applicants and forfeited by successful applicants;

(ii) the applicant was substantially precluded during the prescribed hunting season from using a wildlife document because of a qualifying event or condition set forth in R657-57-6; and

(A) the qualifying event or condition was not the result of the applicant's willful misconduct or gross negligent acts or omissions; and

(B) the applicant was unsuccessful in harvesting an animal for which the wildlife document was issued; and

(iii) the variance is otherwise requested and issued in compliance with the standards, requirements and procedures set forth in this rule.

(4)(a) The Division may grant a variance by awarding a bonus or preference point to a person who filed an untimely wildlife document application in a Division administered drawing, provided:

(i) the variance request involves a wildlife document for any hunt identified in Subsections (2)(a)(i) or (3)(a)(i);

(ii) the applicant was significantly impaired from filing a timely application in a Division administered drawing

because of a qualifying event or condition set forth in R657-57-6;

- (iii) the untimely application was rejected and a bonus or preference point was not awarded for the selected species;
- (iv) the applicant would have been eligible to receive the bonus or preference point had the application been timely filed; and
- (v) the variance is otherwise requested and issued in compliance with the standards, requirements and procedures set forth in this rule.

(5) A Division administered drawing for purposes of subsection (2) does not include a drawing conducted at a wildlife exposition pursuant to R657-55.

(6) The Division may not refund wildlife document fees, except as authorized in Sections 23-19-38, 23-19-38.2 and R657-42-5.

R657-57-5. Group Applications.

(1) Except as provided in Subsection (2), all members of a group successful in obtaining a wildlife document pursuant to R657-62-7 are eligible to receive the same variance relief granted by the Division to any single member of the group under R657-57-4(2) or (3).

(2) Group members are not eligible to receive a refund of the wildlife document fee unless otherwise authorized by Sections 23-19-38, 23-19-38.2, and R657-42-5.

R657-57-6. Qualifying Events and Conditions.

(1) The Division's authority to grant a variance consistent with the requirements of this rule is limited to persons that are completely or substantially precluded during the prescribed season from participating in the hunting activity authorized by an eligible wildlife document, or precluded or substantially impaired from filing a timely wildlife document application in a Division administered drawing because of:

- (a) personal illness or injury;
- (b) the death, or significant injury or illness of an immediate family member; or
- (c) mobilization or deployment under orders of the United States Armed forces, a public health organization, or public safety organization in the interest of national defense or a national emergency.

R657-57-7. Variance Application.

(1) A person may request a variance pursuant to the requirements of this rule by filing an application with the Division within 120 days of the:

- (a) last day of the hunting season for which a season extension variance is requested; or
- (b) drawing application deadline for which a bonus or preference point variance is sought.

(2) The Division may not grant a variance under this rule when the application is received beyond the 120 days limitation period set forth in Subsection (1).

(3) An application for a season extension variance under R657-57-4(1), a bonus point restoration and waiting period waiver variance under R657-57-4(2), or a preference point restoration variance under R657-57-4(3) shall contain the following information and documentation:

- (a) name, address and telephone number of the applicant;
- (b) a brief statement of the variance relief sought;
- (c) the original wildlife document for which a season extension variance is sought with an undetached and unnotched tag;
- (d) a statement verifying the applicant was substantially precluded from participating in a qualified hunt because of:
 - (i) personal illness or injury;

- (ii) the death, or significant injury or illness of an immediate family member; or

- (iii) mobilization or deployment under orders of the United States Armed Forces, or a public health or public safety organization in the interest of national defense or a national emergency.

(e) corroborating documentation of the qualifying event or condition listed in Subsection (2)(d), in the form of:

- (i) a physician's written statement describing and confirming the qualifying injury or illness of the applicant or an immediate family member;

- (ii) a photocopy of the deceased immediate family member's certified death certificate; or

- (iii) a photocopy of the military orders, or a letter from an employment supervisor on official public health or public safety organization letterhead stating:

- (A) the branch of the United States Armed Forces, or name of the public health organization or public safety organization from which the applicant is deployed or mobilized; and

- (B) the nature and length of duty while deployed or mobilized.

(4) An application for a bonus or preference point variance under R657-57-4(4) shall contain the following information and documentation:

- (a) name, address and telephone number of the applicant;

- (b) a brief statement of the variance relief sought;

- (c) a description of the wildlife document application and permit type for which a bonus or preference point variance is sought, including the wildlife species and sex, season dates, and weapon type;

- (d) a statement verifying the applicant was precluded or substantially impaired from submitting a wildlife document application because of:

- (i) personal illness or injury;
- (ii) the death, or significant injury or illness of an immediate family member; or

- (iii) mobilization or deployment under orders of the United States Armed Forces, or a public health or public safety organization in the interest of national defense or a national emergency.

(e) corroborating documentation of the qualifying event or condition listed in Subsection (3)(d), in the form of:

- (i) a physician's written statement describing and confirming the qualifying injury or illness of the applicant or an immediate family member;

- (ii) a photocopy of the deceased immediate family member's certified death certificate; or

- (iii) a photocopy of the military orders, or a letter from an employment supervisor on official public health or public safety organization letterhead stating:

- (A) the branch of the United States Armed Forces, or name of the public health organization or public safety organization from which the applicant is deployed or mobilized; and

- (B) the nature and length of their duty while deployed or mobilized.

(5) The Division may reject an application that is incomplete or that contains false or misleading information.

(6) The Division may require the applicant to provide additional information, documentation, or clarification in conjunction with an application to determine eligibility for a variance.

(7) The Division should make its written decision within 30 days of receiving an application for variance and mail a copy of the decision to the applicant.

R657-57-8. Division Variance Committee.

(1) The Division shall establish a variance committee consisting of the Wildlife Chief, Administrative Services Chief, Licensing Coordinator, and Rules Coordinator, or their designees, which shall:

- (a) review variance applications submitted to the Division pursuant to this rule;
- (b) determine facts relative to variance requests;
- (c) apply the provisions of this rule to relevant facts; and
- (d) grant or deny variance requests in accordance with this rule.

(2) Any variance request granted or denied shall be reviewed and approved by the Division director/designee before notice of decision is provided to the variance request applicant.

R657-57-9. Variance Denial.

(1) The variance committee and Division director shall deny a variance request where the applicant:

- (a) fails to satisfy the variance criteria set forth in this rule;
 - (b) is under a judicial or administrative order suspending his/her Utah hunting privileges for the species at the time:
 - (i) the variance request is filed or at any time during a extension season; or
 - (ii) the wildlife document application period expired for a bonus or preference point variance;
 - (c) was legally ineligible to receive or use the wildlife document for which a season extension variance is sought;
 - (d) is legally ineligible to hunt during the extension season;
 - (e) is legally ineligible to use the weapon type authorized by the wildlife document during the original hunting season or the extension season;
 - (f) provides false or misleading information on a material fact in the variance request application; or
 - (g) provides false or misleading information on a material fact in a previous variance request application.
- (2) The Division may deny a variance request when it is contrary to sound public policy, wildlife management objectives, Division policies and interests, or the interests sought to be served by this rule.

R657-57-10. Wildlife Board Appeals.

(1) A person may appeal the Division's decision on a variance application to the Wildlife Board pursuant to the requirements of this rule. The appeal request must be in writing and received by the Division within 30 calendar days of the issuance date on the Division's decision.

(2) The appeal shall contain the following information and documentation:

- (a) name, address and telephone number of the petitioner;
- (b) a statement of the variance relief sought and justification for the relief;
- (c) a description of the wildlife document application for which the variance is sought, including the document number, species and sex, season dates, and weapon type;
- (d) the original wildlife document for which the variance is sought;
- (e) a statement describing the degree of lost opportunity because of an event or condition; and
- (f) corroborating documentation of the event or condition listed in R657-57-7(3)(d) and (4)(d), which may include:
 - (i) a physician's written statement;
 - (ii) a certified death certificate photocopy;
 - (iii) a photocopy of the military orders;
 - (iv) a letter from an employment supervisor on official

letterhead; or

- (v) court documentation.
- (3) The Wildlife Board may reject a variance appeal that is incomplete or that contains false or misleading information.
- (4) The Wildlife Board may require the petitioner to provide additional information, documentation, or clarification in conjunction with the variance appeal.
- (5) The Wildlife Board may set a time and date for a hearing on the variance appeal where the petitioner may be given an opportunity to address the Wildlife Board concerning the appeal.
 - (a) The Wildlife Board will provide the petitioner notice of the date, time, and location of the hearing.
 - (b) Failure to participate in the hearing may result in dismissal of the variance appeal.
- (6) The Wildlife Board may sustain, overturn, or modify the Division's order which is the subject of the variance appeal, provided the relief granted is consistent with the standards, limitations, requirements, and procedures in R657-57-11 through R657-57-13.
- (7) The Wildlife Board will prepare a written decision on the variance appeal and mail a copy to the petitioner.

R657-57-11. Wildlife Board Variance Authority.

(1) Except as provided otherwise in this rule, the Wildlife Board may grant a variance to any regulation promulgated in Title R657 of the Administrative Code or in proclamation concerning the acquisition or use of a wildlife document, provided the event or condition justifying the variance:

- (a) is not the result of the applicant's willful misconduct or gross negligent acts or omissions;
- (b) substantially precludes the applicant from participating in the activity authorized by the wildlife document; or
- (c) completely or significantly impairs the applicant from filing a timely application in a Division administered drawing; and
- (d) is of a nature that it deprives opportunity from the applicant in a substantially more severe manner than other similarly situated individuals.

(2) The Wildlife Board is limited to considering only those variance applications on which the Division has issued a letter indicating the variance relief sought is beyond its legal authority to grant.

(3) The Wildlife Board shall consider the Division's recommendation on a variance request.

(4) The Wildlife Board may grant a variance that extends a wildlife document season no more than one year into the future.

(5) The Wildlife Board may award a bonus or preference point pursuant to a variance request only when the applicant would have received such a point had the event or condition not intervened.

- (6) The Wildlife Board may not grant a variance:
 - (a) where the request is filed with the Division beyond the 120 day deadline established in R657-57-7(1);
 - (b) where the applicant is not substantially precluded from participating in the prescribed wildlife activity;
 - (c) for a season extension on any hunt not identified in R657-57-4(1)(a)(i) as eligible for a season extension;
 - (d) where the applicant was successful in harvesting an animal for which the wildlife document was issued; or
 - (e) in direct conflict with any provision of the Wildlife Code or elsewhere in statute.

(7) The Wildlife Board may not refund wildlife document fees, except as authorized in Sections 23-19-38 and 23-19-38.2.

R657-57-12. Variance Guidelines.

(1) The Wildlife Board may use the following guidelines in considering and deciding variance appeals and requests submitted pursuant to this rule:

- (a) monetary cost of the wildlife document;
 - (b) degree of difficulty in obtaining the original wildlife document;
 - (c) future opportunity to obtain the same or similar wildlife document;
 - (d) extent of lost opportunity;
 - (e) time actually engaged in the activity authorized by the wildlife document relative to the overall season length;
 - (f) time available to engage in the activity authorized by the wildlife document prior to the event or condition precluding further activity;
 - (g) impact on wildlife management objectives;
 - (h) degree of difficulty in tracking and monitoring season extensions into the future;
 - (i) applicant's fault or contribution in failing to mitigate the degree of lost opportunity;
 - (j) nature of the event or condition contrasted against the advisability of attempting to insure optimal opportunity;
 - (k) objective of a variance is to restore lost opportunity, not provide increased opportunity; and
 - (l) consistency with previous variance request decisions.
- (2) Nothing herein shall be construed as limiting or prohibiting the Wildlife Board from considering additional factors in its discussions and deliberations concerning variance appeals and requests.

discretionary and neither a right nor entitlement in form or substance. The Division and Wildlife Board shall exercise sole discretion in determining whether relief will be granted and to what extent.

KEY: wildlife, permits**March 16, 2015****Notice of Continuation August 5, 2013****23-14-18****23-14-19****R657-57-13. Wildlife Board Variance Denial.**

(1) The Wildlife Board shall deny a variance appeal or request where the applicant:

- (a) fails to satisfy the variance criteria set forth in this rule;
- (b) is under a judicial or administrative order suspending his/her wildlife document privileges at the time the variance request is filed or at any time while the variance would be in effect;
- (c) was legally ineligible to apply for, obtain, or use the original wildlife document for which a variance is sought;
- (d) is legally ineligible to engage in the activity proposed for authorization in a variance;
- (e) is legally ineligible to use the weapon type or implement authorized by a wildlife document during the original season or the proposed substitute season;
- (f) provides false or misleading information on a material fact in the variance request application or the appeal; or
- (g) provides false or misleading information on a material fact in a previous variance request application or appeal.

(2) The Wildlife Board may deny a variance appeal or request when it is contrary to sound public policy, wildlife management objectives, Division policies and interests, or the interests sought to be served by this rule.

R657-57-14. Fraud, Deceit, or Misrepresentation.

Any variance obtained under this rule by fraud, deceit or misrepresentation is void.

R657-57-15. Finality of Decision.

(1) The decision of the Wildlife Board on any variance appeal or request under this rule constitutes final agency action and is not subject to:

- (a) further administrative review; or
- (b) judicial review under Title 63G, Chapter 4 of the Utah Code, Utah Administrative Procedures Act.

(2) The variance relief authorized in this rule is

R657. Natural Resources, Wildlife Resources.**R657-59. Private Fish Ponds.****R657-59-1. Purpose and Authority.**

(1) Under the authority of Sections 23-15-9 and 23-15-10 of the Utah Code, this rule provides the standards and procedures for private fish ponds.

(2) This rule does not regulate fee fishing or private aquaculture as provided in Title 4, Chapter 37 of the Utah Code, and Department of Agriculture Rule R58-17.

(3) Any violation of, or failure to comply with, any provision of Title 23 of the Utah Code, this rule, or any specific requirement contained in a certificate of registration or exemption certificate issued pursuant to this rule may be grounds for suspension of the certificate or denial of future certificates, as determined by the division.

R657-59-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "Aquaculture" means the husbandry, production, harvest, and use of aquatic organisms under controlled, artificial conditions.

(b) "Aquaculture facility" means any facility used for propagating, rearing, or producing aquatic wildlife or aquaculture products. Facilities that are separated by more than 1/2 mile, or facilities that drain to, or are modified to drain to, different drainages are considered to be separate aquaculture facilities, regardless of ownership.

(c)(i) "Aquaculture product" means privately purchased aquatic wildlife, or their eggs or gametes.

(ii) "Aquaculture product" does not include aquatic wildlife obtained from the wild.

(d) "Certified sterile salmonid" means any salmonid fish or gamete that originates from a health certified source and is incapable of reproduction due to triploidy or hybridization.

(i) Triploid salmonids accepted as sterile under this subsection shall originate from a source that is certified as incapable of reproduction using the following protocols:

(A) fish samples shall be collected, prepared, and submitted to a certified laboratory by an independent veterinarian, certified fish health professional, or other professional approved by the division;

(B) certified laboratories shall be limited to independent, professional laboratories capable of reliably testing fish sterility and approved by the division; and

(C) sterility shall be determined by sampling and testing 60 fish from each egg lot with procedures generally accepted in the scientific community as reliable for verifying triploidy with a 95% or greater success rate.

(ii) An aquaculture facility that receives certified sterile salmonid aquaculture product is not required to conduct additional sterility testing prior to stocking the aquaculture product in a private fish pond, provided the sterile salmonids are kept segregated from other fertile salmonids.

(iii) Hybrid salmonid fish species accepted as sterile under this subsection are limited to splake trout (lake trout/brook trout cross) and tiger trout (brown trout/brook trout cross).

(e) "Exemption certificate" means a document issued by the division pursuant to R657-59-7 that exempts a designated private fish pond from the requirement of obtaining a certificate of registration to stock aquaculture product in the pond.

(f)(i) "HUC" or "Hydrologic Unit Code" means a cataloging system developed by the US Geological Survey and the Natural Resource Conservation Service to identify watersheds in the United States. HUCs are typically reported at the large river basin (6-digit HUC) or smaller watershed

(11-digit and 14-digit HUC) scale.

(ii) HUC maps and other associated information are available at <http://water.usgs.gov/wsc/sub/1602.html>.

(g)(a) "Ornamental aquatic animal species" means any species of fish, mollusk, or crustacean that is commonly cultured and sold in the United States' aquarium industry for display.

(b) "Ornamental aquatic animal species" does not include:

(i) fresh water:

(A) sport fish - aquatic animal species commonly angled or harvested for recreation or sport;

(B) baitfish - aquatic animal species authorized for use as bait in R657-13-12, and any other species commonly used by anglers as bait in sport fishing;

(C) food fish - aquatic animal species commonly cultured or harvested from the wild for human consumption; or

(D) native species; or

(ii) aquatic animal species prohibited for importation or possession by any state, federal, or local law; or

(iii) aquatic animal species listed as prohibited or controlled in Sections R657-3-22 and R657-3-23.

(h) "Private fish pond" means a pond, reservoir, or other body of water, or any fish culture system which is contained on privately owned land and used for holding or rearing fish for a private, noncommercial purpose.

(i) "Purchase" means to buy, or otherwise acquire or obtain through barter, exchange, or trade for pecuniary consideration or advantage.

(j) "Salmonid" means any fish belonging to the trout/salmon family.

R657-59-3. Certificate of Registration Not Required.

(1) A certificate of registration is not required to receive and stock an aquaculture product in a private fish pond, provided the following conditions are satisfied:

(a) the pond is not located on a natural lake, natural flowing stream, or reservoir constructed on a natural stream channel;

(b) the pond is properly screened consistent with the requirements in R657-59-15 to prevent the movement of aquatic wildlife into the pond or the movement of any aquaculture product out of the pond;

(c) the aquaculture product is:

(i) delivered to the pond by a licensed aquaculture facility as defined in Section 4-37-103; or

(ii) the owner, lessee, or operator of the private pond:

(A) receives less than 50 pounds of sterile rainbow trout from a licensed aquaculture facility in a single delivery;

(B) possesses documentation from the aquaculture facility verifying the information itemized in R657-59-11(2)(b) and R58-17-14(C)(2) during transport; and

(C) assumes legal responsibility for directly transporting the fish from the aquaculture facility to the private fish pond;

(d) the owner, lessee, or operator of the pond obtains from the aquaculture facility providing the aquaculture product a valid health approval number issued by the Utah Department of Agriculture and Food pursuant to Section 4-37-501;

(e) the species, strain, and reproductive capability of the aquaculture product received is authorized for stocking in the area where the pond is located consistent with the requirements in R657-59-16;

(f) the aquaculture product received is of sufficient size to be incapable of escaping the pond through or around the screen;

(g) the owner or operator of the private fish pond provides the aquaculture facility a signed written statement

that the pond and aquaculture product received are in compliance with this section; and

(h) the owner, lessee, or operator of a private fish pond or an invitee has not previously been found in violation of any provision of Title 4, Chapter 37 or Title 23 of the Utah Code, or this rule.

R657-59-4. Aquaculture Facility Reporting Requirements.

(1) A person who owns or operates an aquaculture facility shall file an annual report with the division documenting each sale or transfer of live aquaculture product made pursuant to R657-59-3 and R657-59-7 to a private fish pond owner, lessee, or operator.

(2) The report shall contain:

(a) the name, address, and Utah health approval number of the person;

(b) the name, address, and phone number of the private fish pond's owner, lessee, or operator;

(c) the number and weight of aquaculture product by:

(i) species;

(ii) strain; and

(iii) reproductive capability;

(d) date of sale or transfer;

(e) description of the private fish pond location, including UTM coordinates; and

(f) written verification for each live sale or transfer that the private fish pond was inspected and is in compliance with the requirements of Sections 23-15-10(2) and (3) (c) and this rule.

(3) The report required in this Subsection shall be submitted to and received by the division no later than December 31.

R657-59-5. Certificate of Registration Required.

(1) A certificate of registration must be obtained from the division to receive, stock, or possess an aquaculture product in a private fish pond where:

(a) the aquaculture product is classified under R657-59-16 as an unauthorized species, strain, or reproductive capability for the area where the pond is located;

(b) the aquaculture facility does not deliver the aquaculture product directly to the private fish pond, unless the transport of fish by the owner, lessee, or operator of the private pond is allowed without a certificate of registration pursuant to R657-59-3(1)(c)(ii); or

(c) the owner, lessee, or operator of a private fish pond or an invitee is found in violation of any provision of Title 4, Chapter 37 or Title 23 of the Utah Code, or this rule.

(2) A separate certificate of registration is required for each private fish pond as defined under "aquaculture facility" in R657-59-2.

R657-59-6. Application for a Certificate of Registration.

(1) A person may apply to receive a certificate of registration for a private fish pond by submitting an application with the required handling and inspection fee to the Wildlife Registration Office, Utah Division of Wildlife Resources, 1594 West North Temple, Salt Lake City, Utah 84114.

(a) Application forms are available at all division offices and at the division's internet address.

(2) A certificate of registration may be issued after a division representative inspects the private fish pond and confirms that the pond and the aquaculture products requested for stocking in the pond meet all requirements in this rule and Title 23 of the Utah Code.

(3) The application may require up to 30 days for processing.

(4) The division may deny a private fish pond

application where:

(a) the application is incomplete, filled out incorrectly, or submitted without the appropriate fee;

(b) the pond is located on a natural lake, natural flowing stream, or a reservoir constructed on a natural stream channel;

(c) the pond is not screened consistent with the requirements in R657-59-15;

(d) the source of the aquaculture product is not an authorized aquaculture facility with a health approval number issued pursuant to Section 4-37-501;

(e) the applicant or its agents or invitees have previously violated of any provision of Title 4, Chapter 37 of the Utah Code, Title 23 of the Utah Code, or this rule;

(f) receiving or stocking the aquaculture product in the pond may:

(i) violate any federal, state or local law or any agreement between the state and another party;

(ii) negatively impact native wildlife species listed by the division as sensitive or by the federal government as threatened or endangered;

(iii) pose an identifiable adverse threat to other wildlife species or their habitat; or

(iv) pose an identifiable adverse impact to the division's game fish stocking regimes or wildlife management objectives;

(g) the aquaculture product received is sufficiently small to be capable of escaping the pond through or around the screen; or

(h) non-salmonid aquaculture product will be stocked in a pond within the 100 year flood plain (below 6500 feet in elevation) in the Green River and Colorado River drainages and the pond does not meet FEMA standards on construction and screening.

(5) An application for private fish pond certificate of registration may not be denied without the review and consent of the division director or a designee.

(6) A private fish pond certificate of registration shall remain effective for 5 years from the date of issuance, unless:

(a) amended by the division at the request of private fish pond owner, lessee, or operator;

(b) terminated or modified by the division pursuant to R657-59-17; or

(c) suspended by the division or a court pursuant to Section 23-19-9.

(7) Certificates of registration are renewable on or before the expiration date identified on the certificate of registration and upon payment of the prescribed handling, and inspection fees.

R657-59-7. Exemption Certificate.

(1) Upon application for a private fish pond certificate of registration and a risk assessment of the pond by the division under R657-59-6, the Division may issue an exemption certificate in lieu of a certificate of registration where the following conditions exist:

(a) The pond is eligible to receive a certificate of registration under the requirements of this chapter;

(b) The pond and species, strain and reproductive capability of aquaculture product requested present no risk to native aquatic wildlife species because:

(i) the location and configuration of the pond physically eliminate the possibility of aquaculture product escaping into the surface waters of the state;

(ii) the pond has no inflow or outflow connection with the surface waters of the state;

(iii) the pond is located in an area where escapement of aquaculture product will cause no ecological damage to native aquatic wildlife species; or

(iv) the pond is located in an area where no Tier I or II

aquatic wildlife species on the division's sensitive species list or threatened or endangered species listed under the Endangered Species Act will be threatened by the risk of escapement; and

(c) the aquaculture product is delivered directly to the pond by the aquaculture facility.

(2) The exemption certificate shall have the legal effect of a certificate of registration for purposes of stocking the pond with the species, strain and reproductive capability of aquaculture product authorized in the exemption certificate.

(3) Aquaculture facilities supplying aquaculture product to private fish ponds operating under an exemption certificate shall comply with:

(a) the written terms of the exemption certificate; and

(b) the inspection and reporting requirements in R657-59-4.

(4) The exemption certificate will:

(a) designate the species, strain and reproductive capability of aquaculture product that may be stocked in the pond;

(b) identify any restrictions or conditions relative to stocking and maintaining aquaculture product in the pond;

(c) identify the owner, lessee, or operator of the private fish pond; and

(d) describe the private fish pond's location, including UTM coordinates.

(5) The private fish pond exemption certificate shall remain effective, without the requirement of renewal, for the useful life of the pond, provided:

(a) the ownership of the pond does not change;

(b) the pond, screen, and inflow and outflow structures remain in the same state that existed when inspected;

(c) the species, strain, and reproductive capability of aquaculture product stocked and maintained in the pond remains consistent with the that authorized in the exemption certificate; and

(d) the exemption certificate is not modified, terminated, or suspended by the division pursuant to Section 23-19-9, R657-59-1(3), or R657-59-17 or a court of competent jurisdiction.

(6) Any private fish pond operating under authority of an exemption certificate which is modified, terminated, or suspended pursuant to Section 23-19-9, R657-59-1(3), or R657-59-17 shall be subject to the aquaculture product depopulation requirements in R657-59-8.

R657-59-8. Failure to Renew Certificates of Registration.

(1) If an owner, lessee, or operator of a private fish pond fails to renew the certificate of registration upon expiration, or the division suspends or terminates the certificate of registration, all live aquaculture products permitted under the certificate of registration shall be disposed of as follows:

(a) Unless the Wildlife Board orders otherwise, all aquaculture products must be removed within 30 days of suspension or the expiration date of the certificate of registration, or within 30 days after ice-free conditions on the water; or

(b) At the discretion of the division, aquaculture products may remain in the waters at the facility, but shall only be taken as prescribed within Rule R657-13 for Taking Fish and Crayfish.

(2) Aquaculture products in a private fish pond may not be moved alive unless the pond has received disease testing and is issued a health approval number from the Department of Agriculture and Food pursuant to Section 4-37-501.

(3) Aquaculture products from a private fish pond infected with any pathogen specified in the Department of Agriculture Rule R58-17 must be disposed of as directed by the division to prevent further spread of such pathogen.

R657-59-9. Reporting Requirements for Private Fish Ponds Authorized by Certificate of Registration.

(1) Any person that possesses a certificate of registration for a private fish pond must submit to the division an annual report of all live aquaculture products purchased or acquired during the year. This report must contain the following information:

(a) the name, address, and phone number of the private fish pond's owner, lessee, or operator;

(b) name, address, and certificate of registration number of the seller or supplier;

(c) the number and weight of aquaculture product by:

(i) species;

(ii) strain; and

(iii) reproductive capability;

(d) date of sale or transfer;

(2) A form for this information is provided by the division.

(3) The annual report must be received by the division no later than January 30.

R657-59-10. Importation.

(1)(a) The species, strains, and reproductive capabilities of live aquaculture products that may be imported and stocked in a private fish pond without a certificate of registration are provided in R657-59-16;

(b) A certificate of registration or exemption certificate is required to import and stock all species, strains and reproductive capabilities of live aquaculture products not specifically exempted from licensure in R657-59-16.

(2) Applications to import aquaculture products are available from all division offices and must be submitted to the division's Wildlife Registration Office in Salt Lake City. Applications may require up to 30 days for action.

R657-59-11. Acquiring and Transferring Aquaculture Products.

(1) Live aquaculture products, other than ornamental fish, may be:

(a) purchased or acquired only from sources that have a valid certificate of registration from the Utah Department of Agriculture and Food to sell such products or from a person located outside Utah if that person is approved by the Utah Department of Agriculture and Food to import the particular aquaculture product; and

(b) acquired, purchased or transferred only from sources which have been health approved by the Utah Department of Agriculture and Food and assigned a fish health approval number as provided in Section 4-37-501. This also applies to separate facilities owned by the same entity since each facility is treated separately, regardless of ownership.

(2)(a) Any person who has been issued a valid certificate of registration may transport live aquaculture products as specified on the certificate of registration to the private fish pond.

(b) All transfers or shipments of live aquaculture products must be accompanied by documentation of the source and destination of the product, including:

(i) name, address, certificate of registration number, and fish health approval number of the source;

(ii) number and weight being shipped, by species; and

(iii) name, address, and certificate of registration number, if applicable, of the destination.

R657-59-12. Inspection of Records and Facilities.

(1) The following records and information must be maintained for a period of two years and must be available for inspection by a division representative during reasonable hours:

(a) records of purchase and acquisition of aquaculture products, including records maintained in connection with the reporting requirements in R657-59-9;

(b) certificates of registration; and

(c) valid identification of stocks.

(2) The division and its authorized representatives may inspect a private fish pond at any time to verify compliance with the requirements of Title 23 of the Utah Code and this rule, and to conduct pathological testing.

R657-59-13. Prohibited Activities.

(1) A private fish pond may not be developed on a natural lake; natural flowing stream; or reservoir constructed on a natural stream channel.

(2) Live aquatic wildlife may not be collected from the wild and placed in a private fish pond.

(3) Any aquaculture product received or held in a private fish pond may not be released from the pond or transported live to another location.

(4) A private fish pond owner, lessee, or operator may not sell, donate, or transfer from the pond live aquaculture product, including gametes and eggs.

R657-59-14. Fishing License and Transportation of Dead Aquaculture Product.

(1) A fishing license is not required to take fish from a legally recognized private fish pond.

(2) A fishing license is not required to transport dead aquaculture product from a private fish pond, provided the person possesses a receipt with the following information:

(a) species and number of fish;

(b) date caught;

(c) certificate of registration number or exemption certificate number of the private fish pond, where applicable; and

(d) name, address, and telephone number of the owner, lessee, or operator of the private fish pond.

(3) Any person that has a valid fishing license may transport up to a legal limit of dead aquaculture product from a private fish pond without further documentation.

R657-59-15. Screen Requirements.

(1) All inlets and outlets of a private fish pond must be screened as follows to prevent the movement of aquatic wildlife into the pond or the escapement of any aquaculture product from the pond:

(a) the screen shall be constructed of durable materials that are capable of maintaining integrity in a water and air environment for an extended period of time;

(b) the screen shall have no openings, seams or mesh width greater than the width of the fish being stocked;

(c) screen construction and placement shall eliminate any movement of aquaculture product into or out of the pond;

(d) screen dimensions shall be based on precluding escapement of the size of the fish being stocked;

(e) all water entering or leaving the pond, including run off and other high water events, shall flow through a screen consistent with the requirements of this subsection; and

(f) the screen shall be maintained and in place at all times while any aquaculture product remains in the pond.

(2) Ponds with no inlet or outlet to the surface waters of the state are not required to have a screen or device to restrict movement of aquaculture product.

R657-59-16. Species, Strains, and Reproductive Capabilities of Aquaculture Product Authorized by Area for Stocking in Private Fish Ponds Without a Certificate of Registration or Exemption Certificate.

(1) A certificate of registration or exemption certificate

must be obtained from the division pursuant to R657-59-6 and R657-59-7 prior to stocking in any private fish pond:

- (a) non-salmonid aquaculture product; or
- (b) any other species or reproductive capability of aquaculture product not specifically authorized in this Section.

(2)(a) The following subsections designate areas closed to stocking aquaculture product in private fish ponds using a general area identifier such as canyon, creek, spring, or location and then followed by a specific area identifier in the form of hydrologic unit code (HUC) or township and range.

(b) The general area identifier is included for purposes of reference only and may include all or part of the associated drainage.

(c) The HUC or township and range designations constitute the legal descriptions of the actual closed areas.

(3) Certified sterile salmonid aquaculture product may be stocked without a certificate of registration or exemption certificate in any private fish pond within the state consistent with R657-59-3, except for ponds located within the following areas:

(a) Washington County - stocking is prohibited in the following areas:

- (i) Ash Creek - HUC 150100080405;
- (ii) Beaver Dam Wash - HUC 15010010;
- (iii) Laverkin Creek - HUC 150100080302;
- (iv) Leeds Creek - HUC 150100080906;
- (v) Baker Dam Reservoir/Santa Clara River - HUC

150100080704;

- (vi) Tobin Wash - HUC 150100080802;
- (vii) Sand Cove Wash - HUC 150100080801;
- (viii) Manganese Wash/Santa Clara River - HUC

150100080804;

- (ix) Wittwer Canyon/Santa Clara River - HUC

150100080808;

- (x) Cove Wash/Santa Clara River - HUC

150100080809;

- (xi) Moody Wash - HUC 150100080603;
- (xii) Upper Moody Wash - HUC 150100080602;
- (xiii) Magotsu Creek - HUC 150100080704;
- (xiv) South Ash Creek - HUC 150100080405);
- (xv) Water Canyon - HUC 150100080701);
- (xvi) Chinatown Wash/Virgin River - HUC

150100080508;

- (xvii) Lower Gould Wash - HUC 150100080508;
- (xviii) Grapevine Wash/Virgin River - HUC

150100080903;

- (xix) Cottonwood Wash/Virgin River - HUC

150100080909;

- (xx) Middleton Wash/Virgin River - HUC

150100080910;

- (xxi) Lower Fort Pierce Wash - HUC 150100080605;
- (xxii) Atkinville Wash - HUC 150100080303;
- (xxiii) Lizard Wash - HUC 150100080302;
- (xxiv) Val Wash/Virgin River - HUC 150100080307;
- (xxv) Bulldog Canyon - HUC 150100080310; and
- (xxvi) Fort Pierce Wash - HUC 15010009.

(j) Fertile rainbow trout may be stocked without a certificate of registration or exemption certificate in any private fish pond within the state consistent with R657-59-3, except for ponds located within the following areas and elevations:

Beaver County - stocking is prohibited in the following:

- (i) North Creek - HUCs 160300070203, 160300070208;

and

- (ii) Pine Creek (near Sulphurdale) - HUC 160300070501.

(b) Box Elder County - stocking is prohibited in the following:

(i) Morison Creek - HUC 16020308;
 (ii) Bettridge Creek - HUC 16020308;
 (iii) Death Creek - HUC 16020308;
 (iv) Camp Creek - HUC 16020308;
 (v) Goose Creek - HUC 17040211;
 (vi) Raft River - HUC 17040210;
 (vii) Fat Whorled Pond Snail Springs - Township 10 North, Ranges 4 and 5 West; and
 (viii) Mantua Reservoir - HUC 16010204.
 (c) Cache County - stocking is prohibited in the following:
 (i) Logan River - HUC 16010203;
 (ii) Blacksmith Fork - HUC 16010203;
 (iii) East Fork Little Bear River - HUC 16010203; and
 (iv) Little Bear River - HUC 16010203.
 (d) Carbon County - stocking is prohibited in any private fish pond above 7000 feet in elevation.
 (e) Daggett County - stocking is prohibited in any private fish pond above 7000 feet in elevation.
 (f) Davis County - no areas closed to stocking fertile rainbow trout.
 (g) Duchesne County - stocking is prohibited in any private fish pond above 7000 feet in elevation.
 (h) Emery County - stocking is prohibited in any private fish pond above 7000 feet in elevation.
 (i) Garfield County - stocking is prohibited in the following areas:
 (i) Birch Creek/Main Canyon - HUC 140700050102;
 (ii) Center Creek (tributary to East Fork Sevier R) HUC 160300020412;
 (iii) Cottonwood Creek - HUC 160300020406;
 (iv) East Fork of Boulder Creek/ West Fork Boulder Creek - HUC 140700050206; and
 (v) Ranch Creek (East Fork Sevier River drainage) - HUC 160300020405.
 (j) Grand County - stocking is prohibited in any private fish pond above 7000 feet in elevation.
 (k) Iron County - no areas closed to stocking fertile rainbow trout.
 (l) Juab County - stocking is prohibited in the following areas:
 (i) Sulphur Wash - HUC 160203011303;
 (ii) Middle Pleasant Valley Draw - HUC 160203011402;
 (iii) Lower Pleasant Valley Draw - HUC 160203011403;
 (iv) Cookscomb Ridge - HUC 160203011501;
 (v) Outlet Salt Marsh Lake - HUC 160203011502;
 (vi) Deep Creek Range - HUC 160203011503;
 (vii) Snake Valley - HUC 160203011504;
 (viii) Little Red Cedar Wash - HUC 160203011505;
 (ix) Trout Creek - HUC 160203060101;
 (x) Smelter Knolls - HUC 160203060104;
 (xi) Toms Creek - HUC 160203060201;
 (xii) Goshute Canyon - HUC 160203060202;
 (xiii) Indian Farm Creek - HUC 160203060204;
 (xiv) Spring Creek - HUC 160203060803;
 (xv) Fifteenmile Creek - HUC 160203060804;
 (xvi) East Creek/East Deep Creek - HUC 160203060805;
 (xvii) East Creek/East Deep Creek - HUC 160203060806;
 (xviii) West Deep Creek - HUC 160203060808;
 (xix) Horse Valley - HUC 160203060304;
 (xx) Starvation Canyon - HUC 160203060305;
 (xxi) Cane Springs - HUC 160203060307;
 (xxii) Fish Springs Range - HUC 160203060308;
 (xxiii) Middle Fish Springs Wash - HUC 160203060309;

(xxiv) Lower Fish Springs Wash - HUC 160203060403;
 (xxv) Fish Springs - HUC 160203060405;
 (xxvi) Wilson Health Springs - HUC 160203060407;
 (xxvii) Vernon Creek - HUC 160203040102;
 (xxviii) Outlet Chicken Creek - HUC 160300050206;
 (xxix) Little Valley/Sevier River - HUC 160300050403;
 (xxx) Pole Creek/Salt Creek - HUC 160202010104; and
 (xxxi) West Creek/Current Creek - HUC 160202010107.
 (m) Kane County - no areas closed to stocking fertile rainbow trout.
 (n) Millard County - stocking is prohibited in the following areas:
 (i) Outlet Salt Marsh Lake - HUC 160203011502;
 (ii) Sulphur Wash - HUC 160203011303;
 (iii) Cockscomb Ridge - HUC 160203011501;
 (iv) Tungstonia Wash - HUC 160203011302;
 (v) Salt Marsh Lake - HUC 160203011304;
 (vi) Indian George Wash - HUC 160203011301
 (vii) Outlet Bishop Springs - HUC 160203011203;
 (viii) Warm Creek - HUC 160203011204;
 (ix) Headwaters Bishop Springs - HUC 160203011202;
 (x) Indian Pass - HUC 160203011107;
 (xi) Chevron Ridge - HUC 160203011110;
 (xii) Petes Knoll - HUC 160203011109;
 (xiii) Red Gulch - HUC 160203011102;
 (xiv) Horse Canyon - HUC 160203011106;
 (xv) Hampton Creek - HUC 160203011105;
 (xvi) Knoll Springs - HUC 160203011103;
 (xvii) Browns Wash - HUC 160203011101;
 (xviii) Outlet Baker Creek - HUC 160203011004;
 (xix) Outlet Old Mans Canyon - HUC 160203011003;
 (xx) Hendrys Creek - HUC 160203011104;
 (xxi) Headwaters Old Mans Canyon - HUC 160203011002;
 (xxii) Rock Canyon - HUC 160203011001
 (xxiii) Silver Creek - Baker Creek - HUC 160203010806;
 (xxiv) Outlet Weaver Creek - HUC 160203010804;
 (xxv) Conger Spring - HUC 160203010702; and
 (xxvi) Sheepmens Little Valley - HUC 160203010607.
 (o) Morgan County - stocking is prohibited in the following areas:
 (i) Weber River - HUC 16020102;
 (ii) East Canyon Creek - HUC 16020102; and
 (iii) Lost Creek - HUC 16020101.
 (p) Piute County - stocking is prohibited in the following areas:
 (i) Birch Creek HUC 160300010603;
 (ii) Clear Creek HUC 1603000301;
 (iii) Manning Creek - HUC 160300030203;
 (iv) Tenmile Creek HUC 160300030204.
 (q) Rich County - stocking is prohibited in the following areas:
 (i) Bear Lake including all its tributaries - HUC 16010201;
 (ii) Big Creek - HUC 16010101;
 (iii) Birch Creek from Birch Creek Reservoir upstream and tributaries HUC 16010101;
 (iv) Little Creek from Little Creek Reservoir upstream and tributaries HUC 16010101;
 (v) Otter Creek and its tributaries HUC 16010101;
 (vi) Woodruff Creek - HUC 16010101; and
 (vii) Home Canyon and Meachum Canyon (Deseret Ranch) - HUC 16010101.
 (r) Salt Lake County - stocking is prohibited in the following areas:
 (i) Big Cottonwood Canyon Creek - HUC 160202040201;
 (ii) Little Cottonwood Canyon Creek - HUC

- 160202040202;
 (iii) Mill Creek - HUC 160202040301;
 (iv) Parleys Creek - HUC 160202040302;
 (v) Emigration Creek - HUC 160202040303;
 (vi) City Creek - HUC 160202040304; and
 (vii) Red Butte Creek/Emigration Creek - HUC 160202040306.
 (s) San Juan County - stocking is prohibited in any private fish pond above 7000 feet in elevation.
 (t) Sanpete County:
 (i) stocking is prohibited in the following areas west of the Manti Mountain Range divide:
 (A) Dry Creek/San Pitch River - HUC 160300040201;
 (B) Oak Creek/San Pitch River - HUC 160300040202;
 (C) Cottonwood Canyon/San Pitch River - HUC 160300040203;
 (D) Birch Creek/San Pitch River - HUC 160300040204;
 (E) Pleasant Creek - HUC 160300040205;
 (F) Dublin Wash/San Pitch River - HUC 160300040206;
 (G) Cedar Creek - HUC 160300040207;
 (H) Spring Hollow/San Pitch River - HUC 160300040208;
 (I) Upper Oak Creek - HUC 160300040302;
 (J) Petes Canyon/San Pitch River - HUC 160300040306;
 (K) Uinta Gulch - HUC 160202020201;
 (L) Upper Thistle Creek - HUC 160202020202;
 (M) Nebo Creek - HUC 160202020203;
 (N) Middle Thistle Creek - HUC 160202020204;
 (O) Dry Canyon/San Pitch River - HUC 160300040308;
 (P) Maple Canyon/San Pitch River - HUC 160300040309;
 (Q) Gunnison Reservoir/San Pitch River - HUC 160300040503;
 (R) Outlet San Pitch River - HUC 160300040505;
 (S) Beaver Creek - HUC 140700020201;
 (T) Box Canyon/Muddy Creek - HUC 140700020203;
 (U) Skumpah Creek-Salina Creek - HUC 160300030402; and
 (V) Headwaters Twelvemile Creek - HUC 160300040402.
 (ii) stocking is prohibited in any private fish pond above 7000 feet in elevation east of the Manti Mountain Range divided.
 (u) Sevier County - stocking is prohibited in the following areas:
 (i) Clear Creek HUC 1603000301;
 (ii) Salina Creek - HUC 160300030402; and
 (iii) U M Creek - HUC 140700030101.
 (v) Summit County - stocking is prohibited in the following areas:
 (i) Bear River and all tributaries - HUC 16010101;
 (ii) Mill Creek and all tributaries - HUC 16010101;
 (iii) Muddy Creek and Van Tassel Creek - HUC 14040108;
 (iv) Little West Fork/Blacks Fork - HUC 14040107;
 (v) Black Fork - HUC 14040107;
 (vi) Archie Creek - HUC 14040107;
 (vii) West Fork Smiths Fork - HUC 14040107;
 (viii) Gilbert Creek - HUC 14040107;
 (ix) East Fork Smiths Fork - HUC 14040107;
 (x) Dahalgreen Creek - HUC 14040106;
 (xi) Henrys Fork - HUC 14040106;
 (xii) Spring Creek and Poison Creek - HUC 14040106;
 (xiii) West Fork Beaver Creek - HUC 14040106;
 (xiv) Middle Fork Beaver Creek - HUC 14040106;
 (xv) Echo Creek - HUC 16020101;
 (xvi) Chalk Creek - HUC 16020101;
 (xvii) Silver Creek - HUC 16020101;
 (xviii) Weber River - HUC 16020101;
 (xix) Beaver Creek - HUC 16020101;
 (xx) Provo River - HUC 16020101;
 (xxi) Kimball Creek - HUC 160201020101;
 (xxii) Big Dutch Hollow/East Canyon Creek - HUC 160201020103;
 (xxiii) Silver Creek - HUC 160201010403; and
 (xxiv) Toll Canyon/East Canyon Creek - HUC 160201020102.
 (w) Tooele County - stocking is prohibited in the following areas:
 (i) Toms Creek - HUC 160203060201;
 (ii) Goshute Canyon - HUC 160203060202;
 (iii) Eightmile Wash - HUC 160203060203;
 (iv) Indian Farm Creek - HUC 160203060204;
 (v) Willow Spring Wash HUC 160203060205;
 (vi) Willow Canyon - HUC 160203080104;
 (vii) Bettridge Creek - HUC 160203080106;
 (viii) East Creek/East Deep Creek - HUC 160203060806;
 (ix) East Deep Creek - HUC 160203060807;
 (x) West Deep Creek - HUC 160203060808;
 (xi) Gullmette Gulch/Deep Creek - HUC 160203060902;
 (xii) Pony Express Canyon/Deep Creek - HUC 160203060904;
 (xiii) Badlands - HUC 160203060905;
 (xiv) White Sage Flat/Deep Creek - HUC 160203060907;
 (xv) Lower Fish Springs Wash - HUC 160203060403;
 (xvi) Fish Springs - HUC 160203060405;
 (xvii) Wilson Health Springs - HUC 160203060407;
 (xviii) East Government Creek - HUC 160203040101;
 (xix) Vernon Creek - HUC 160203040102; and
 (xx) Faust Creek - HUC 160203040105.
 (x) Uintah County - stocking is prohibited in any private fish pond above 7000 feet in elevation.
 (y) Utah County - stocking is prohibited in the following areas:
 (i) Starvation Creek - HUC 160202020101;
 (ii) Upper Soldier Creek - HUC 160202020102;
 (iii) Tie Fork - HUC 160202020103;
 (iv) Middle Soldier Creek - HUC 160202020105;
 (v) Lake Fork - HUC 160202020106;
 (vi) Lower Soldier Creek - HUC 160202020107;
 (vii) Upper Thistle Creek - HUC 160202020202;
 (viii) Nebo Creek - HUC 160202020203;
 (ix) Middle Thistle Creek - HUC 160202020204;
 (x) Lower Thistle Creek - HUC 160202020205;
 (xi) Sixth Water Creek - HUC 160202020301;
 (xii) Cottonwood Canyon - HUC 160202020302;
 (xiii) Fifth Water Creek - HUC 160202020303;
 (xiv) Upper Diamond Fork - HUC 160202020304;
 (xv) Wanrhodes Canyon - HUC 160202020305;
 (xvi) Middle Diamond Fork - HUC 160202020306;
 (xvii) Lower Diamond Fork - HUC 160202020307;
 (xviii) Headwaters Left Fork Hobble Creek - HUC 160202020401;
 (xix) Headwaters Right Fork Hobble Creek - HUC 160202020402;
 (xx) Outlet Left Fork Hobble Creek - HUC 160202020403;
 (xxi) Outlet Right Fork Hobble Creek - HUC 160202020404;
 (xxii) Upper Spanish Fork Creek - HUC 160202020501;
 (xxiii) Middle Spanish Fork Creek - HUC 160202020502;

(xxiv) Peteetneet Creek - HUC 160202020601;
 (xxv) Spring Creek - HUC 160202020602;
 (xxvi) Beer Creek - HUC 160202020603;
 (xxvii) Big Spring Hollow/South Fork Provo River - HUC 160202030502;
 (xxviii) Pole Creek/Salt Creek - HUC 160202010104;
 (xxix) Middle American Fork Canyon - HUC 160202010802;
 (xxx) Mill Fork - HUC 160202020104; and
 (xxxi) Upper American Fork Canyon - HUC 160202010801.
 (z) Wasatch County - stocking is prohibited in the following areas:
 (i) Willow Creek/Strawberry River - HUC 140600040101;
 (ii) Clyde Creek/Strawberry River - HUC 140600040102;
 (iii) Indian Creek - HUC 140600040104;
 (iv) Trout Creek/Strawberry River - HUC 140600040105;
 (v) Soldier Creek/Strawberry River - HUC 140600040106;
 (vi) Willow Creek - HUC 140600040301;
 (vii) Current Creek Reservoir - HUC 140600040401;
 (viii) Little Red Creek - HUC 140600040402;
 (ix) Outlet Current Creek - HUC 140600040403;
 (x) Water Hollow/Current Creek - HUC 140600040404;
 (xi) Headwaters West Fork Duchesne River - HUC 140600030101;
 (xii) Little South Fork Provo River - HUC 160202030201;
 (xiii) Bench Creek/Provo River - HUC 160202030202;
 (xiv) Lady Long Hollow/Provo River - HUC 160202030203;
 (xv) Charcoal Canyon/Provo River - HUC 160202030204;
 (xvi) Drain Tunnel Creek - HUC 160202030301;
 (xvii) Lake Creek - HUC 160202030302;
 (xviii) Center Creek - HUC 160202030303;
 (xix) Cottonwood Canyon/Provo River - HUC 160202030304;
 (xx) Snake Creek - HUC 160202030305;
 (xxi) Spring Creek/Provo River - HUC 160202030306;
 (xxii) Daniels Creek - HUC 160202030401;
 (xxiii) Upper Main Creek - HUC 160202030403;
 (xxiv) Lower Main Creek - HUC 160202030404;
 (xxv) Deer Creek Reservoir-Provo River - HUC 160202030405;
 (xxvi) Provo Deer Creek - HUC 160202030501;
 (xxvii) Little Hobbie Creek - HUC 160202030402;
 (xxviii) Mill Hollow/South Fork Provo River - HUC 160202030104; and
 (xxix) Mud Creek - HUC 140600040103.
 (aa) Washington County - stocking is prohibited in the following areas:
 (i) Ash Creek - HUC 150100080405;
 (ii) Beaver Dam Wash - HUC 15010010;
 (iii) Laverkin Creek - HUC 150100080302;
 (iv) Leeds Creek - HUC 150100080906;
 (v) Baker Dam Reservoir/Santa Clara River - HUC 150100080704;
 (vi) Tobin Wash - HUC 150100080802;
 (vii) Sand Cove Wash - HUC 150100080801;
 (viii) Manganese Wash/Santa Clara River - HUC 150100080804;
 (ix) Wittwer Canyon/Santa Clara River - HUC 150100080808;
 (x) Cove Wash/Santa Clara River - HUC 150100080809;

(xi) Moody Wash - HUC 150100080603;
 (xii) Upper Moody Wash - HUC 150100080602;
 (xiii) Magotsu Creek - HUC 150100080704;
 (xiv) South Ash Creek - HUC 150100080405);
 (xv) Water Canyon - HUC 150100080701);
 (xvi) Chinatown Wash/Virgin River - HUC 150100080508;
 (xvii) Lower Gould Wash - HUC 150100080508;
 (xviii) Grapevine Wash/Virgin River - HUC 150100080903;
 (xix) Cottonwood Wash/Virgin River - HUC 150100080909;
 (xx) Middleton Wash/Virgin River - HUC 150100080910;
 (xxi) Lower Fort Pierce Wash - HUC 150100080605;
 (xxii) Atkinville Wash - HUC 150100080303;
 (xxiii) Lizard Wash - HUC 150100080302;
 (xxiv) Val Wash/Virgin River - HUC 150100080307;
 (xxv) Bulldog Canyon - HUC 150100080310; and
 (xxvi) Fort Pierce Wash - HUC 15010009.
 (bb) Wayne County - no areas closed to stocking fertile rainbow trout.
 (cc) Weber County - stocking is prohibited in the following areas:
 (i) North Fork Ogden River - HUC 16020102;
 (ii) Middle Fork Ogden River and Gertsen Creek - HUC 16020102; and
 (iii) South Fork Ogden River and Gertsen Creek - HUC 16020102.

R657-59-17. Division Authority to Restrict Private Fish Ponds.

(1)(a) Stocking and maintaining aquaculture products in private fish ponds pursuant to this rule is a conditional privilege that is subject to unilateral modification or termination by the division or other competent legal authority.

(b) Those who establish and maintain private fish ponds under this rule do so with the understanding that the laws and regulations governing private fish ponds are subject to change and that such changes may require:

- (i) discontinuation of stocking particular species, strains, or reproductive capabilities of aquaculture product in the pond;
- (ii) partial or complete depopulation of the aquaculture product in the pond;
- (iii) modifications in screen requirements and other structural elements associated with the pond; or
- (iv) new restrictions and requirements in connection with operating the pond and maintaining the aquaculture product within it.

(2) The division may unilaterally restrict a private fish pond operating with or without a certificate of registration or exemption certificate from receiving or possessing particular species, strains and reproductive capabilities of aquaculture product previously authorized when stocking or continued possession of the product in the pond:

- (a) violates any federal, state or local law or any agreement between the state and another party;
- (b) negatively impacts native wildlife species listed by the division as sensitive or by the federal government as threatened or endangered;
- (c) poses an identifiable adverse threat to other wildlife species or their habitat; or
- (d) poses an identifiable adverse impact to the division's game fish stocking regimes or wildlife management objectives.

(3) Any costs or losses incurred as the result of future modifications to this rule or the operational status of a private fish pond made pursuant to this section, including

terminations and depopulations, shall be borne exclusively by the owner, lessee or operator of the private fish pond.

KEY: wildlife, aquaculture, fish

March 16, 2015

23-15-9

Notice of Continuation August 5, 2013

23-15-10

R657. Natural Resources, Wildlife Resources.**R657-62. Drawing Application Procedures.****R657-62-1. Purpose and Authority.**

(1) Under authority of Sections 23-14-18 and 23-14-19, the Wildlife Board has established this rule for drawing applications and procedures.

(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 respective guidebooks of the Wildlife Board.

R657-62-2. Definitions.

(1) Terms used in this rule are defined in Section 23-13-2.

(2) In addition:

(a) "Application" means a form required by the Division which must be completed by a person and submitted to the Division in order to apply for a hunting permit.

(b) "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 an executed contract for sale of eligible property.

(c) "Limited entry hunt" means any hunt listed in the hunt tables published by the Wildlife Board and is identified as a premium limited entry hunt or limited entry hunt. "Limited entry hunt" does not include cougar pursuit or bear pursuit.

(d) "Limited entry permit" means any permit obtained for a limited entry hunt, including conservation permits, expo permits and sportsman permits.

(e)(i) "Valid application" means an application:

(A) for a permit to take a species for which the applicant is eligible to possess;

(B) for a permit to take a species regardless of estimated permit numbers;

(C) for a certificate of registration; and

(D) containing sufficient information, as determined by the division, to process the application, including personal information, hunt information, and sufficient payment.

(ii) Applications missing any of the items in Subsection (i) may be considered valid if the application is timely corrected through the application correction process.

(f) "Waiting period" means a specified period of time that a person who has obtained a permit must wait before applying for the same permit type.

(g) "Once-in-a-lifetime hunt" means any hunt listed in the hunt tables published by the Wildlife Board and is identified as once-in-a-lifetime, and does not include general or limited entry hunts.

(h) "Once-in-a-lifetime permit" means any permit obtained for a once-in-a-lifetime hunt by any means, including conservation permits, sportsman permits, cooperative wildlife management unit permits and limited entry landowner permits.

R657-62-3. Scope of Rule.

(1) This rule sets forth the procedures and requirements for completing and filing applications to receive the following hunting permits and/or certificates of registrations:

(a) Dedicated Hunter certificate of registrations;

(b) limited-entry deer;

(c) limited-entry elk;

(d) limited-entry pronghorn;

(e) once-in-a-lifetime;

(f) public cooperative wildlife management unit;

(g) general season deer and youth elk;

(h) limited entry bear;

(i) bear pursuit;

(j) antlerless big game;

(k) sandhill crane;

(l) sharp-tail and greater sage grouse;

(m) swan

(n) cougar;

(o) sportsman; and

(p) turkey.

R657-62-4. Residency Restrictions.

(1) Only a resident may apply for or obtain a resident permit or resident certificate of registration and only a nonresident may apply for or obtain a nonresident permit or nonresident certificate of registration.

(2)(a) To apply for a resident permit or certificate of registration, a person must be a resident at the time of purchase.

(b) The posting date of the drawing shall be considered the purchase date of a permit or certificate of registration issued through a drawing.

R657-62-5. Hunting on Private Lands.

(1) Any person who applies for a hunt that occurs on private land is responsible for obtaining written permission from the landowner to access the property. The division does not guarantee access and cannot restore lost opportunity, bonus points, or permit fees when access is denied. Hunters should contact private landowners for permission to access their land prior to applying for a permit. The Division does not have the names of landowners where hunts occur.

R657-62-6. Applications.

(1)(a) Applications are available at the division's internet address, and must be completed and submitted online by the date prescribed in the respective guidebook of the Wildlife Board.

(b) The permit fees and handling fees must be paid with a valid debit or credit card.

(c) Any license, permit or certificate of registration issued to a person is invalid where full payment is not remitted to and received by the division.

(d) A person who applies for or obtains a permit or certificate of registration must notify the division of any change in mailing address, residency, telephone number, email address, and physical description.

R657-62-7. Group Applications.

(1) When applying as a group all applicants in the group with valid applications and who are eligible to possess the permit or certificate of registration applied for shall receive a permit or certificate of registration where the group is successful in the drawing.

(2) Group members must apply for the same hunt choices.

(3) When applying as a group, if the available permit or certificate of registration quota is not large enough to accommodate the group size, the group application will not be considered.

R657-62-8. Bonus Points.

(1) Bonus points are used to improve odds for drawing permits.

(2)(a) A bonus point is awarded for:

(i) each valid unsuccessful application when applying for limited-entry permits; or

(ii) each valid application when applying for bonus points.

(b) Bonus points are awarded by species for;

(i) limited-entry deer including cooperative wildlife management unit buck deer and management buck deer;

(ii) limited-entry elk including cooperative wildlife management unit bull elk and management bull elk;

(iii) limited-entry pronghorn including cooperative wildlife management unit buck pronghorn;

(iv) once-in-a-lifetime species including cooperative wildlife management units;

(v) limited entry bear;

(vi) antlerless moose;

(vii) cougar; and

(viii) turkey

(3)(a) A person may not apply in the drawing for both a permit and a bonus point for the same species.

(b) A person may not apply for a bonus point if that person is ineligible to apply for a permit for the respective species.

(c) Group applications will not be accepted when applying for bonus points.

(d) A person may apply for bonus points only during the applicable drawing application for each species.

(4)(a) Fifty percent of the permits for each hunt unit will be reserved for applicants with the greatest number of bonus points.

(b) Based on the applicant's first choice, the reserved permits will be designated by a random drawing number to eligible applicants with the greatest number of bonus points for each species.

(c) If reserved permits remain, the reserved permits will be designated by a random number to eligible applicants with the next greatest number of bonus points for each species.

(d) The procedure in Subsection (c) will continue until all reserved permits are issued or no applications for that species remain.

(e) Any reserved permits remaining and any applicants who are not selected for reserved permits will be returned to the applicable drawing.

(5)(a) Each applicant receives a random drawing number for:

(i) each species applied for; and

(ii) each bonus point for that species.

(6) Bonus points are forfeited if a person obtains a permit through the drawing for that bonus point species including any permit obtained after the drawing.

(7) Bonus points are not forfeited if:

(a) a person is successful in obtaining a conservation permit, expo permit, sportsman permit, or harvest objective bear permit;

(b) a person obtains a landowner or a cooperative wildlife management unit permit from a landowner; or

(c) a person obtains a poaching-reported reward permit.

(8) Bonus points are not transferable.

(9) Bonus points are averaged and rounded down when two or more applicants apply together on a group application.

(10)(a) Bonus points are tracked using social security numbers or division-issued customer identification numbers.

(b) The division shall retain electronic copies of applications from 1996 to the current drawings for the purpose of researching bonus point records.

(c) Any requests for researching an applicant's bonus point records must be submitted within the time frames provided in Subsection (b).

(d) Any bonus points on the division's records shall not be researched beyond the time frames provided in Subsection (b).

(e) The division may void or otherwise eliminate any bonus point obtained by fraud, deceit, misrepresentation, or in violation of law.

R657-62-9. Preference Points.

(1) Preference points are used in the applicable drawings to ensure that applicants who are unsuccessful in the drawing will have first preference in the next year's drawing.

(2)(a) A preference point is awarded for:

(i) each valid, unsuccessful application of the first-choice hunt when applying for a general buck deer permit; or

(ii) each valid unsuccessful application when applying for an antlerless deer, antlerless elk, doe pronghorn, Sandhill Crane, Sharp-tailed grouse, Greater sage grouse or Swan permit; or

(iii) each valid application when applying only for a preference point in the applicable drawings.

(b) Preference points are awarded by species for:

(i) general buck deer;

(ii) antlerless deer;

(iii) antlerless elk;

(iv) doe pronghorn;

(v) Sandhill Crane;

(vi) Sharp-tailed Grouse;

(vii) Greater sage grouse; and

(viii) Swan.

(3)(a) A person may not apply in the drawing for both a preference point and a permit for the species listed in (2)(b).

(b) A person may not apply for a preference point if that person is ineligible to apply for a permit.

(c) Preference points shall not be used when obtaining remaining permits.

(4) Preference points are forfeited if:

(a) a person obtains a first-choice hunt general buck deer permit through the drawing;

(b) a person obtains an antlerless deer, antlerless elk, doe pronghorn, Sandhill Crane, Sharp-tailed grouse, Greater sage grouse or Swan permit through the drawing;

(5) Preference points are not transferable.

(6) Preference points are averaged and rounded down when two or more applicants apply together on a group application.

(7)(a) Preference points are tracked using social security numbers or division-issued customer identification numbers.

(b) The division shall retain copies of electronic applications from 2000 to the current applicable drawings for the purpose of researching preference point records.

(c) Any requests for researching an applicant's preference point records must be submitted within the time frames provided in Subsection (b).

(d) Any preference points on the division's records shall not be researched beyond the time frames provided in Subsection (b).

(e) The division may eliminate any preference point obtained by fraud, deceit, misrepresentation, or in violation of law.

R657-62-10. Dedicated Hunter Preference Points.

(1) Preference points are used in the dedicated hunter certificate of registration drawing to ensure that applicants who are unsuccessful in the drawing will have first preference in the next year's drawing.

(2) A preference point is awarded for:

(a) each valid unsuccessful application;

(b) each valid application when applying only for a preference point in the dedicated hunter drawing.

(3)(a) A person may not apply in the drawing for both a preference point and a certificate of registration.

(b) A person may not apply for a preference point if that person is ineligible to apply for a certificate of registration.

(4) Preference points are forfeited if a person obtains a certificate of registration through the drawing.

(5)(a) Preference points are not transferable.

(b) Preference points shall only be applied to the Dedicated Hunter drawing.

(6) Preference points are averaged and rounded down to the nearest whole point when two or more applicants apply together on a group application.

(7)(a) Preference points are tracked using social security numbers or division-issued customer identification numbers.

(b) The division shall retain copies of electronic applications from 2011 to the current applicable drawing for the purpose of researching preference point records.

(c) Any requests for researching an applicant's preference point records must be requested within the time frames provided in Subsection (b).

(d) Any preference points on the division's records shall not be researched beyond the time frames provided in Subsection (b).

(e) The division may eliminate any preference points earned that are obtained by fraud, deceit or misrepresentation.

R657-62-11. Corrections, Withdrawals and Resubmitting Applications.

(1)(a) If an error is found on the application, the applicant may be contacted for correction.

(b) The division reserves the right to correct or reject applications.

(2)(a) An applicant may withdraw their application from the permit or certificate of registration drawing by the date published in the respective guidebook of the Wildlife Board.

(b) An applicant may resubmit their application, after withdrawing a previous application, for the permit or certificate of registration drawing by the date published in the respective guidebook of the Wildlife Board.

(c) Handling fees, hunting or combination license fees and donations will not be refunded. Resubmitted applications will incur a handling fee.

(3) To withdraw an entire group application, all applicants must withdraw their individual applications.

R657-62-12. Drawing Results.

Drawing results will be made available by the date prescribed in the respective guidebook of the Wildlife Board.

R657-62-13. License, Permit, Certificate of Registration and Handling Fees.

(1) Unsuccessful applicants will not be charged for a permit or certificate of registration.

(2) The handling fees and hunting or combination license fees are nonrefundable.

(3) All license, permit, certificate of registration and handling fees must be paid with a valid debit or credit card.

R657-62-14. Permits Remaining After the Drawing.

(1) Any permits remaining after the drawing are available on the date published in the respective guidebook of the Wildlife Board on a first-come, first-served basis from division offices, participating license agents and through the division's internet site.

R657-62-15. Waiting Periods for Permits Obtained After the Drawing.

(1) Waiting periods do not apply to the purchase of remaining permits sold over the counter except as provided in Section 2.

(2) Waiting periods are incurred as a result of purchasing remaining permits after the drawing. If a remaining permit is purchased in the current year, waiting periods will be in effect when applying in the drawing in following years.

R657-62-16. Dedicated Hunter Certificates of Registration.

(1)(a) Applicants for a dedicated hunter certificate of registration must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Rule R657-38.

(b) Each prospective participant must complete Dedicated Hunter program orientation course annually before submitting an application.

(2) Group applications are accepted. Up to four applicants may apply as a group.

R657-62-17. Lifetime License Permits.

(1) Lifetime License permits shall be issued pursuant to Rule R657-17.

R657-62-18. Big Game.

(1) Permit Applications

(a) Limited entry, Cooperative Wildlife Management Unit, Once-in-a-Lifetime, Management Bull Elk, Management Buck Deer, General Buck Deer, and Youth General Any Bull Elk permit applications.

(i) A person must possess or obtain a valid hunting or combination license to apply for or obtain a big game permit.

(ii) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Rule R657-5.

(iii) A person may obtain only one permit per species of big game, including limited entry, cooperative wildlife management unit, once-in-a-lifetime, conservation, landowner and general permits, except antlerless permits as provided in the Antlerless Addendum and permits as provided in Rule R657-42.

(b) A resident may apply in the big game drawing for the following permits:

(i) only one of the following:

(A) buck deer - limited entry and cooperative wildlife management unit;

(B) bull elk - limited entry and cooperative wildlife management unit; or

(C) buck pronghorn - limited entry and cooperative wildlife management unit; and

(ii) only one once-in-a-lifetime permit, including once-in-a-lifetime cooperative wildlife management unit permits.

(c) A nonresident may apply in the big game drawing for the following permits:

(i) all of the following:

(A) buck deer -limited entry;

(B) bull elk - limited entry;

(C) buck pronghorn - limited entry; and

(D) all once-in-a-lifetime species.

(ii) Nonresidents may not apply for cooperative management units through the big game drawing.

(d) A resident or nonresident may apply in the big game drawing by unit for:

(i) a statewide general archery buck deer permit; or

(ii) for general any weapon buck deer; or

(iii) for general muzzleloader buck deer; or

(iv) a dedicated hunter certificate of registration.

(2) Youth

(a) For purposes of this section "youth" means any person 17 years of age or younger on July 31.

(b) Youth applicants who apply for a general buck deer permit

(i) will automatically be considered in the youth drawing based upon their birth date.

(ii) 20% of general buck deer permits in each unit are reserved for youth hunters.

(iii) Up to four youth may apply together for youth general deer permits.

(iv) Preference points shall be used when applying.

(v) Any reserved permits remaining and any youth applicants who were not selected for reserved permits shall be returned to the general buck deer drawing.

(c) Youth applicants who apply for a management buck deer permit

(i) will automatically be considered in the youth drawing based upon their birth date.

(ii) 30% of management buck deer permits in each unit are reserved for youth hunters.

(iii) Bonus points shall be used when applying

(iv) Any reserved permits remaining and any youth applicants who were not selected for reserved permits shall be returned to the management buck deer drawing.

(3) Senior

(a) For purposes of this section "senior" means any person 65 years of age or older on the opening day of the management buck deer archery season published in the guidebook of the Wildlife Board for taking big game.

(b) Senior applicants who apply for a management buck deer permit

(i) will automatically be considered in the senior drawing based upon their birth date.

(ii) 30% of management buck deer permits in each unit are reserved for senior hunters.

(iii) Bonus points shall be used when applying.

(c) Any reserved permits remaining and any senior applicants who were not selected for reserved permits shall be returned to the management buck deer drawing.

(4) Drawing Order

(a) Permits for the big game drawing shall be drawn in the following order:

(i) limited entry, cooperative wildlife management unit and management buck deer;

(ii) limited entry, cooperative wildlife management unit and management bull elk;

(iii) limited entry and cooperative wildlife management unit buck pronghorn;

(iv) once-in-a-lifetime;

(v) general buck deer - lifetime license;

(vi) general buck deer - dedicated hunter;

(vii) general buck deer - youth;

(viii) general buck deer; and

(ix) youth general any bull elk.

(b) Any person who draws one of the following permits is not eligible to draw a once-in-a-lifetime permit:

(i) limited entry, Cooperative Wildlife Management unit or management buck deer;

(ii) limited entry, Cooperative Wildlife Management unit or management bull elk; or

(iii) a limited entry or Cooperative Wildlife Management unit buck pronghorn.

(c) If any permits listed in Subsection (a)(i) through (a)(iii) remain after the big game drawing after all choices have been evaluated separately for residents and nonresidents, a second evaluation will be done allowing cross-over usage of remaining resident and nonresident permit quotas.

(5) Groups

(a) Limited Entry

(i) Up to four people may apply together for limited entry deer, elk or pronghorn; or resident cooperative wildlife management unit permits.

(b) Group applications are not accepted for management buck deer or bull elk permits.

(c) Group applications are not accepted for Once-in-a-lifetime permits.

(d) General season

(i) Up to four people may apply together for general deer permits.

(ii) Up to two youth may apply together for youth general any bull elk permits.

(iii) Up to four youth may apply together for youth general deer permits.

(6) Waiting Periods

(a) Deer waiting period.

(i) Any person who draws or obtains a limited entry, management or cooperative wildlife management unit buck deer permit through the big game drawing process may not apply for or receive any of these permits again for a period of two seasons.

(ii) A waiting period does not apply to:

(A) general archery, general any weapon, general muzzleloader, conservation, sportsman, poaching-reported reward permits; or

(B) cooperative wildlife management unit or limited entry landowner buck deer permits obtained through the landowner.

(b) Elk waiting period.

(i) Any person who draws or obtains a limited entry, management or cooperative wildlife management unit bull elk permit through the big game drawing process may not apply for or receive any of these permits for a period of five seasons.

(ii) A waiting period does not apply to:

(A) general archery, general any weapon, general muzzleloader, conservation, sportsman, poaching-reported reward permits; or

(B) cooperative wildlife management unit or limited entry landowner bull elk permits obtained through the landowner.

(c) Pronghorn waiting period.

(i) Any person who draws or obtains a buck pronghorn or cooperative wildlife management unit buck pronghorn permit through the big game drawing may not apply for or receive any of these permits thereafter for a period of two seasons.

(ii) A waiting period does not apply to:

(A) conservation, sportsman, poaching-reported reward permits; or

(B) cooperative wildlife management unit or limited entry landowner buck pronghorn permits obtained through the landowner.

(d) Once-in-a-lifetime species waiting period.

(i) Any person who draws or obtains a permit for any bull moose, bison, Rocky Mountain bighorn sheep, desert bighorn sheep or Rocky Mountain goat may not apply for or receive an once-in-a-lifetime permit for the same species in the big game drawing or sportsman permit drawing.

(ii) A person who has been convicted of unlawfully taking a once-in-a-lifetime species may not apply for or obtain a permit for that species.

(e) Cooperative Wildlife Management Unit and landowner permits.

(i) Waiting periods and once-in-a-lifetime restrictions do not apply to purchasing limited entry landowner or cooperative wildlife management unit permits obtained through a landowner, except as provided in Subsection (ii).

(ii) Waiting periods are incurred and applied for the purpose of applying in the big game drawing as a result of obtaining a cooperative wildlife management unit bull moose permit through a landowner.

R657-62-19. Black Bear.

(1) Permit and Pursuit Applications.

(a) A person must possess or obtain a valid hunting or combination license in order to apply for or obtain a limited entry bear permit or bear pursuit permit.

(b) A person may not apply for or obtain more than one bear permit distributed pursuant to this rule within the same calendar year.

(c) Limited entry bear permits are valid only for the hunt unit and for the specified

season designated on the permit.

(d)(i) Applicants may select up to three hunt unit choices when applying for limited entry bear permits. Hunt unit choices must be listed in order of preference.

(ii) Applicants must specify in the application a specific season for their limited entry or bear pursuit permit.

(e) Any person intending to use bait during their bear hunt must obtain a certificate of registration as provided in Sections R657-33-13 and 14.

(f) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Sections 23-19-22.5, 23-19-11 and 23-20-20.

(2) Group applications are not accepted.

(3) Waiting periods.

(a) Any person who obtains a limited entry bear permit through the division drawing, may not apply for a permit thereafter for a period of two years.

(4) A person must complete a mandatory orientation course prior to applying for any bear permit offered through a division drawing or obtaining bear permits as described in R657-33-3(5).

R657-62-20. Antlerless Species.

(1) Permit Applications.

(a) A person must possess or obtain a valid hunting or combination license in order to apply for or obtain an antlerless permit.

(b) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Rule R657-5.

(c) A person may apply in the drawing for and draw the following permits, except as provided in Subsection (d):

- (i) antlerless deer;
- (ii) antlerless elk;
- (iii) doe pronghorn; and
- (iv) antlerless moose, if available.

(d) Any person who has obtained a buck pronghorn permit or a bull moose permit may not apply in the same year for a doe pronghorn permit or antlerless moose permit, respectively, except for permits remaining after the drawing as provided in R657-62-15.

(e) Applicants may select up to five hunt choices when applying for antlerless deer, antlerless elk and antlerless pronghorn.

(f) Applicants may select up to two hunt choices when applying for antlerless moose.

(g) Hunt unit choices must be listed in order of preference.

(h) A person may not submit more than one application in the antlerless drawing per species.

(2) Youth applications.

(a) For purposes of this section, "youth" means any person 17 years of age or younger on July 31.

(b) Twenty percent of the antlerless deer, elk and doe pronghorn permits are reserved for youth hunters.

(c) Youth applicants who apply for an antlerless deer, elk, or doe pronghorn permit as provided in this Subsection, will automatically be considered in the youth drawing based upon their birth date.

(3) Drawing Order

(a) Permits are drawn in the order listed in the guidebook of the Wildlife Board for taking big game.

(b) Any reserved permits remaining and any youth applicants who were not selected for reserved permits shall be returned to the antlerless drawing.

(c) If permits remain after all choices have been evaluated separately for residents and nonresidents, a second evaluation will be done allowing cross-over usage of remaining resident and nonresident permit quotas.

(4) Group Applications

(a) Up to four hunters can apply together for antlerless deer, antlerless elk and doe pronghorn

(b) Group applications are not accepted for antlerless moose.

(c) Youth hunters who wish to participate in the youth drawing must not apply as a group.

(5) Waiting Periods

(a) Antlerless moose waiting period.

(i) Any person who draws or obtains an antlerless moose permit or a cooperative wildlife management unit antlerless moose permit through the antlerless drawing process, may not apply for or receive an antlerless moose permit thereafter for a period of five seasons.

(ii) A waiting period does not apply to cooperative wildlife management unit antlerless moose permits obtained through the landowner.

R657-62-21. Sandhill Crane, Sharp-Tailed and Greater Sage Grouse.

(1) Permit applications.

(a) A person may obtain only one Sandhill Crane permit each year.

(b) A hunting or combination license is required when taking Sandhill Crane, Sharp-Tailed and Greater Sage Grouse and may be purchased when applying for the permit.

(c) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Utah Code 23-19-24, 23-19-11 and 23-20-20.

(d) Applicants may select up to four hunt choices. Hunt unit choices must be listed in order of preference.

(2) Youth applications.

(a) For purposes of this section, "youth" means any person 17 years of age or younger on July 31 for the purpose of obtaining Sharp-tailed grouse and Greater Sage grouse permits, and 15 years of age or younger on the Youth Waterfowl hunt, as , for the purpose of obtaining a Sandhill Crane permit.

(b) Fifteen percent of the Sandhill Crane, Sharp-tailed grouse and Greater sage grouse permits are reserved for youth hunters.

(c) Youth applicants who apply for a Sandhill Crane, Sharp-tailed grouse or Greater sage grouse permit as provided in this Subsection, will automatically be considered in the youth drawing based upon their birth date.

(3) Group applications.

(a) Up to four people may apply together.

(b) Youth hunters who wish to participate in the youth drawing must not apply as a group.

(4) Waiting Periods do not apply.

R657-62-22. Swan.

(1) Permit applications.

(a) A person may obtain only one swan permit each year.

(i) A person may not apply more than once annually.

(b) A Utah hunting or combination license is required when hunting Swan and may be purchased when applying for the permit.

(c) The division shall issue no more than the number of swan permits authorized by the U.S. Fish and Wildlife Service each year.

(i) The division may withhold up to 1% of the authorized number of swan permits each year to correct division errors, which may occur during the drawing process.

(ii) Division errors may be corrected using the withheld swan permits in accordance with the Division Error Remedy Rule R657-50.

(iii) Withheld swan permits shall be used to correct division errors reported to or discovered by the division on or before the fifth day preceding the opening day of the swan hunt.

(iv) Withheld swan permits remaining after correcting any division errors shall be issued prior to the opening day of the swan hunt to the next person on the alternate drawing list.

(d) A person must complete a one-time orientation course before applying for a swan permit, except as provided under Subsection R657-9-6(3)(b).

(i) Remaining swan permits available for sale shall be issued only to persons having previously completed the orientation course.

(e) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Utah Code 23-19-24, 23-19-11 and 23-20-20.

(2) Youth applications.

(a) For purposes of this section, "youth" means any person 15 years of age or younger on the Youth Waterfowl Day hunt.

(b) Fifteen percent of the Swan permits are reserved for youth hunters.

(c) Youth who apply for a swan permit will automatically be considered in the youth permit drawing based on their birth date.

(3) Group applications.

(a) Up to four people may apply together in a Group Application.

(b) Youth hunters who wish to participate in the youth drawing must not apply as a group.

(4) Waiting period does not apply.

R657-62-23. Cougar.

(1) Permit Applications

(a) A person must possess or obtain a valid hunting or combination license to apply for or obtain a cougar limited entry permit.

(b) A person may not apply for or obtain more than one cougar permit for the same year.

(c) Limited entry cougar permits are valid only for the limited entry management unit and for the specified season provided in the hunt tables of the proclamation of the Wildlife Board for taking cougar.

(d) Applicants may select up to three management unit choices when applying for limited entry cougar permits. Management unit choices must be listed in order of preference.

(e) If permits remain after all choices have been evaluated separately for residents and nonresidents, a second evaluation shall be done allowing cross-over usage of remaining resident and nonresident permit quotas.

(f) Any limited entry cougar permit purchased after the season opens is not valid until seven days after the date of purchase.

(g) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Utah Code 23-19-22.5, 23-19-11 and 23-20-20.

(2) Group applications are not accepted.

(3) Waiting periods.

(a) Any person who draws or purchases a limited entry cougar permit valid for the current season may not apply for a permit thereafter for a period of three seasons.

(b) Waiting periods are not incurred as a result of purchasing cougar harvest objective permits.

R657-62-24. Sportsman.

(1) Permit applications.

(a) One sportsman permit is offered to residents for each of the following species:

(i) desert bighorn (ram);

(ii) bison (hunter's choice);

(iii) buck deer;

(iv) bull elk;

(v) Rocky Mountain bighorn (ram);

(vi) Rocky Mountain goat (hunter's choice);

(vii) bull moose;

(viii) buck pronghorn;

(ix) black bear;

(x) cougar; and

(xi) wild turkey.

(b) Bonus points shall not be awarded or utilized when applying for or obtaining sportsman permits.

(2) Group applications are not accepted.

(3) Waiting Periods.

(a) Any person who applies for or obtains a Sportsman Permit is subject to all waiting periods and exceptions as applicable to the species pursuant to Rule R657-41.

(b) Once-in-lifetime waiting periods.

(i) If you have obtained a once-in-a-lifetime permit through the sportsman drawing you are ineligible to apply for that once-in-a-lifetime species through the big game drawing.

(ii) If you have obtained a once-in-a-lifetime permit through the big game drawing you are ineligible to apply for that once-in-a-lifetime species through the sportsman drawing.

(c) Limited Entry waiting periods.

(i) Waiting periods do not apply to Sportsman deer, elk, pronghorn, bear or cougar.

(ii) Waiting period will not be incurred for receipt of a Sportsman deer, elk, pronghorn, bear or cougar.

R657-62-25. Turkey.

(1) Permit applications.

(a) A person must possess a valid hunting or combination license in order to apply for or obtain a wild turkey permit.

(b) A person may obtain only one limited entry or general spring wild turkey permit each year. A person may obtain wild turkey conservation permits in addition to obtaining one limited entry or spring wild turkey permit as well as a fall general season permit.

(c) Applicants may select up to five hunt choices when applying for limited entry turkey permits. Hunt unit choices must be listed in order of preference.

(d) A turkey permit allows a person, using any legal weapon as provided in Section R657-54-7, to take one bearded turkey within the area and season specified on the permit.

(2) Group applications.

(a) Up to four people may apply together in a Group Application.

(b) Youth hunters who wish to participate in the youth drawing must not apply as a group.

(3) Waiting period does not apply.

(4) Youth permits

(a) Up to 15 percent of the limited entry permits and fall general season permits are available to youth hunters.

(b) For purposes of this section "youth" means any person who is 17 years of age or younger on July 31.

(c) Youth who apply for a turkey permit will automatically be considered in the youth permit drawing based on their birth date.

(d) Bonus points shall be used when applying for youth turkey permits.

(e) Youth who are successful in obtaining a limited entry turkey permit but unsuccessful in harvesting a bird during the limited entry hunt season, may use the limited entry turkey permit to participate in the youth 3-day turkey hunt and the spring general season turkey hunt provided no more than one bird is harvested.

KEY: wildlife, permits

March 16, 2015

Notice of Continuation April 14, 2014

23-14-18

23-14-19

R657. Natural Resources, Wildlife Resources.**R657-68. Trial Hunting Authorization.****R657-68-1. Purpose and Authority.**

Pursuant to Sections 23-14-18 and 23-14-19, this rule implements the trial hunting authorization program established in Section 23-19-14.6 to expand public participation in hunting sports by allowing a person to temporarily obtain specified hunting licenses and permits and participate in hunting activities on a trial basis without first satisfying regular hunter education requirements.

R657-68-2. Definitions.

- (1) Terms used in this rule are defined in Section 23-13-2.
- (2) In addition:
 - (a) "Commercial hunting area" means a parcel of land where privately owned game birds are released under Section 23-17-6 and R657-22 for the purpose of allowing hunters to take them for a fee.
 - (b) "Division drawing" means a random selection process administered by the division or under its authority for the purpose of allocating hunting permits to the public.
 - (i) "Division drawing" includes the wildlife expo permit drawing administered under R657-55.
 - (c) "Multi-year license" means a license issued by the division under R657-45-3 that is valid for a period exceeding 365 days.
 - (d) "Supervising hunter" means a person qualified under R657-68-5(1)(b) that accompanies a trial hunter while participating in hunting activities.
 - (e) "Trial hunter" means a person who possesses a valid hunting license or permit obtained with a trial hunting authorization pursuant to this rule.
 - (f) "Trial hunting authorization" means a document issued by the division authorizing the holder to obtain and use specified hunting licenses and permits without having completed an approved hunter education course, subject to the qualifications, requirements and limitations set forth in this rule.
 - (g) "Written consent" means a written or typed document containing the:
 - (i) full name, date of birth, and home address of the trial hunter;
 - (ii) full name, home address, and phone number of the supervising hunter;
 - (iii) nature of the planned hunting activity and the general area where it will occur;
 - (iv) parent or legal guardian's consent for the:
 - (A) trial hunter to participate in the described hunting activity; and
 - (B) supervising hunter to transport and accompany the trial hunter in the activity; and
 - (v) name, signature, and phone number of the authorizing parent or legal guardian.

R657-68-3. Obtaining a Trial Hunting Authorization.

- (1) Upon application, the division may issue a trial hunting authorization to a resident or nonresident who:
 - (a) is 11 years of age or older at the time of application;
 - (b) is eligible under state and federal law to possess a firearm, muzzleloader, bow and arrow, or crossbow;
 - (c) is born after December 31, 1965 and has not completed an approved hunter education course; and
 - (d) successfully completes an abbreviated online course on trial hunting program requirements and hunting ethics and safety.
- (2) The division may charge a handling fee for a trial hunting authorization.

R657-68-4. Effect and Term of a Trial Hunting Authorization.

- (1)(a) A person who obtains a trial hunting authorization will receive an accompanying registration number to be used in lieu of a hunter education number when applying for or purchasing a hunting license or permit authorized in Subsection (b).

(b) A person who possesses a trial hunting authorization may apply for and purchase the following Utah hunting licenses and permits, notwithstanding the hunter education requirements in Section 23-19-11 and R657-23:

- (i) hunting license, excluding multi-year licenses;
- (ii) combination license, excluding multi-year licenses;
- (iii) all hunting permits, excluding the following big game permits allocated through a division drawing:

- (A) premium limited entry;
- (B) limited entry;
- (C) once-in-a-lifetime;
- (D) cooperative wildlife management unit;
- (E) dedicated hunter; and
- (F) sportsman.

(2)(a) A trial hunting authorization:

- (i) is valid for a single, three year term, except as provided in Subsection (6); and

(ii) shall immediately terminate upon the holder successfully completing an approved hunter education course, as provided in Section 23-19-11 and R657-23.

(b) A person may not obtain more than one trial hunting authorization in a lifetime.

(3) A trial hunting authorization shall be considered an "approved hunter education course" under Section 23-17-6(3)(a)(ii) for the exclusive and limited purpose of hunting on a commercial hunting area.

(a) A person who hunts on a commercial hunting area with a trial hunting authorization is subject to the requirements in R657-68-5.

(4)(a) A person who possesses a current trial hunting authorization may not participate in the Hunter Mentoring Program (R657-67) as a hunting mentor.

(b) A person who possesses a current trial hunting authorization may participate in the Hunter Mentoring Program (R657-67) as a qualifying minor, as hereafter provided.

(i) A trial hunting authorization will be recognized by the division as a "hunter education program" under R657-67-3(1)(b) for the exclusive and limited purpose of a qualifying minor participating in the Hunter Mentoring Program.

(ii) Notwithstanding the big game permit limitations in Subsection R657-68-4(1)(b)(iii), a qualifying minor possessing a current trial hunting authorization may share any big game permit authorized in the Hunter Mentoring Program rule.

(iii) Both the qualifying minor and hunting mentor are subject to the provisions of this rule and the Hunter Mentoring Program rule when a hunting permit is shared under R657-67-3 with a qualifying minor possessing a current trial hunting authorization.

(5) A person that applies for a big game hunting permit with a trial hunting authorization is subject to the minimum age requirements set forth in Section 23-19-22.

(6)(a) A trial hunting authorization that expires after a hunting permit application is filed in a division drawing shall remain valid to the date the permit is issued for the exclusive purpose of receiving and using the permit.

(i) A trial hunting authorization extended under Subsection (6)(a) beyond the prescribed three year term may not be used during the extension period to obtain any other hunting license or permit.

(b) A person that obtains a license or permit with a valid trial hunting authorization that thereafter expires prior to the conclusion of the hunting season assigned to that license or permit may use the license or permit through the entire season, subject to the limitations and conditions set forth in R657-68-5.

(c) A person that successfully completes an approved hunter education course prior to using a hunting license or permit obtained with a trial hunting authorization is not subject to the limitations and conditions set forth in R657-68-5, provided proof of hunter education compliance is carried on the person while hunting.

R657-68-5. Using a Hunting License or Permit Obtained with a Trial Hunting Authorization.

(1) A person that obtains a hunting license or permit with a trial hunting authorization issued under R657-68-3 may use the license or permit, provided they are:

(a) 12 years of age or older; and
(b) accompanied, as defined in Section 23-20-20(1), in the field at all times while hunting by a resident or nonresident, supervising hunter who:

(i) is 21 years of age or older;
(ii) is eligible under state and federal law to possess a firearm and archery equipment;
(iii) possesses a current Utah hunting or combination license;

(iv) has satisfied applicable hunter education requirements under Section 23-19-11; and

(v) obtains the written consent of the parent or legal guardian when accompanying a trial hunter that is under 18 years of age.

R657-68-6. Supervising Hunter Responsibilities.

(1) A supervising hunter that escorts a trial hunter under R657-68-5(1)(b) shall:

(a) accompany, as defined in Section 23-20-20(1), the trial hunter at all times in the field while hunting;

(b) not accompany more than two trial hunters in the field at any point in time;

(c) provide the trial hunter direct supervision and instruction on hunting regulations, ethics and safety; and

(d) possess on their person a valid Utah hunting or combination license issued in their name; and

(e) possess the written consent of the parent or legal guardian when accompanying a trial hunter under 18 years of age.

R657-68-7. Violation and Discipline.

(1)(a) A trial hunter may not take protected wildlife under authority of a license or permit obtained with a trial hunting authorization, unless accompanied at all times in the field by a supervising hunter satisfying the requirements of R657-68-5(1)(b).

(b) A person may not take game birds on a commercial hunting area under authority of a trial hunting authorization, unless accompanied at all times in the field by a supervising hunter satisfying the requirements of R657-68-5(1)(b).

(2) The division may refuse to issue a trial hunting authorization to a person that:

(a) fails to satisfy the eligibility criteria in R657-68-3 or R657-68-5(1)(a);

(b) provides false or misleading information in the application for a trial hunting authorization; or

(c) has engaged in conduct that results in a conviction, no contest plea, plea held in abeyance, or diversion agreement to a:

(i) violation of the Wildlife Resources Code, or the rules and guidebooks of the Wildlife Board; or

(ii) crime that when considered with the privileges granted in a trial hunting authorization bears a reasonable relationship to the person's ability or willingness to safely and responsibly participate in the program.

(3) A hunting license or permit is invalid when obtained with a trial hunting authorization that is acquired by fraud, deceit, or misrepresentation.

**KEY: wildlife, game laws, hunter education
March 16, 2015**

**23-14-18
23-14-19
23-19-14.6**

R671. Pardons (Board of), Administration.**R671-201. Original Parole Grant Hearing Schedule and Notice.****R671-201-1. Schedule and Notice.**

(1) Within six months of an offender's commitment to prison the Board shall give notice of the month and year in which the inmate's original hearing will be conducted. A minimum of seven days prior notice should be given regarding the specific day and approximate time of such hearing.

(2)(a) Homicide offense commitment, for purposes of this rule, means a prison commitment to serve a sentence for a conviction of aggravated murder (if the sentence includes the possibility of parole), murder, felony murder, manslaughter, child abuse homicide, negligent homicide, automobile homicide, homicide by assault, or any attempt, conspiracy or solicitation to commit any of these offenses.

(b) Sexual offense commitment, for purposes of this rule, means a prison commitment to serve a sentence for a conviction of any crime for which an offender is defined as a kidnap offender pursuant to Utah Code Ann. Subsection 77-41-102(9); or for which an offender is defined as a sex offender pursuant to Utah Code Ann. Subsection 77-41-102(16); or any attempt, conspiracy or solicitation to commit any of the offenses listed in those sections.

(3)(a) All homicide offense commitments eligible for parole shall be routed to the Board as soon as practicable for the determination of the month and year for an original hearing. In setting an original hearing for a homicide offense commitment, the Board shall only consider information available to the court or offender at the time of sentencing.

(b) Homicide offense commitments not eligible for parole (including sentences of life without parole or death) shall not be scheduled for original hearings.

(4) If the offender is less than 18 years of age at the time of commitment and the offense is eligible for parole, the case shall be routed to the Board as soon as practicable for the determination of the month and year for an original hearing.

(5) When an offender's prison commitment does not include a homicide offense commitment, an offender is eligible to have an original hearing before the Board as follows:

(a) After the service of fifteen years for first degree felony commitments when the most severe sentence imposed and being served is a sentence greater than 15 years to life, excluding enhancements.

(b) After the service of seven years for first degree felony commitments when the most severe sentence imposed and being served is a sentence of 10 years to life, or 15 years to life, excluding enhancements.

(c) After the service of three years for all other first degree felony commitments.

(d) After the service of eighteen months if the most serious offense of incarceration is a second degree felony sexual offense commitment.

(e) After the service of six months for all other second degree felony commitments.

(f) After the service of twelve months if the most serious offense of incarceration is a third degree felony sexual offense commitment.

(g) After the service of three months for all other third degree felony and class A misdemeanor commitments.

(6)(a) An offender may request that their original appearance and hearing before the Board be scheduled other than as provided by this rule. An offender's request shall specify the extraordinary circumstances or reasons which give rise to the request. The Board may grant or deny the offender's request in its sole discretion.

(b) The Board may, in its discretion, depart from the schedule as provided by this rule based upon an offender's request due to extraordinary circumstances, when an offender has unadjudicated criminal charges pending at the time a hearing would normally be scheduled, or upon its own motion.

KEY: parole, inmates, hearings
March 24, 2015
Notice of Continuation September 22, 2014

77-27-7

R708. Public Safety, Driver License.**R708-7. Functional Ability in Driving: Guidelines for Physicians.****R708-7-1. Purpose.**

The purpose of this rule is to establish standards and guidelines to assist health care professionals in determining who may be impaired, the responsibilities of the health care professionals, and the driver's responsibilities regarding their health as it relates to highway safety.

R708-7-2. Authority.

This rule is authorized by Sections 53-3-224, 53-3-303, 53-3-304, and 49 CFR 391.43.

R708-7-3. Definitions.

(1) "Board" means the Driver License Medical Advisory Board created in Section 53-3-303.

(2) "Division" means the Driver License Division.

(3) "Health care professional" means a physician or surgeon licensed to practice medicine in the state, or when recommended by the Medical Advisory Board, may include other health care professionals licensed to conduct physical examinations in this state.

(4) "Impaired person" means a person who has a mental, emotional, or nonstable physical disability or disease that may impair the person's ability to exercise reasonable and ordinary control at all times over a motor vehicle while driving on the highway. It does not include a person having a nonprogressive or stable physical impairment that is objectively observable and that may be evaluated by a functional driving examination.

R708-7-4. Health and Driving.

(1) Every driver operating a vehicle is individually responsible for their health when driving. Each applicant for a Utah driver license shall be required to answer personal health questions related to driving safety in accordance with recommendations made by the Driver License Medical Advisory Board pursuant to the provisions of Section 53-3-303(8). If the applicant experiences a significant health problem, the applicant is required to take a medical report form furnished by the division to a health care professional who provides all requested information, including a safety assessment level that reflects the applicant's medical condition.

(2) The health care professional will be expected to discuss the applicant's health as it may affect driving abilities and to make special recommendations in unusual circumstances. Based upon a completed safety assessment, the division may deny driving privileges or issue a license with or without limitations in accordance with the standards described in this rule and lists, tables, and charts incorporated herein. Health care professionals have a responsibility to help reduce unsafe highway driving conditions by carefully applying these guidelines and standards, and by counseling with their patients about driving under medical constraints.

R708-7-5. Driver's Responsibilities.

(1) The 1979 Utah State Legislature has defined driver operating responsibilities in Section 53-3-303, related to physical, mental or emotional impairments of drivers. Drivers are:

(a) responsible to refrain from driving if there is uncertainty caused from having a physical, mental or emotional impairment which may affect driving safety;

(b) expected to seek competent medical evaluation and advice about the significance of any impairment that relates to driving vehicles safely; and

(c) responsible for reporting a "physical, mental or emotional impairment which may affect driving safety" to the Driver License Division in a timely manner.

R708-7-6. Health Care Professional's Responsibilities.

(1) Pursuant to Section 53-3-303, health care professionals shall:

(a) make reports to the division respecting impairments which may affect driving safety when requested by their patients. Nevertheless, the final responsibility for issuing a driver license remains with the director of the division;

(b) counsel their patients about how their condition affects safe driving. For example, if medication is prescribed for a patient which may cause changes in alertness or coordination, the health care professional shall advise the patient about how the medication can affect safe driving, and when it would be safe to operate a vehicle. Or, if a patient's visual acuity drops, the patient should similarly be advised, at least until corrective action has been taken to improve vision; and

(c) in accordance with Section 53-3-303(14)(b), be responsible for making available to their patients without reservation, their recommendations and appropriate information related to driving safety and responsibilities, whether defined by published guidelines or not.

R708-7-7. Driver License Medical Advisory Board.

(1) The Driver License Medical Advisory Board, as per Section 53-3-303, shall advise the director of the division and recommend written functional ability and safety assessment guidelines and standards for determining the physical, mental and emotional capabilities of applicants for licenses, appropriate to various driving abilities.

(2) In case of uncertainty of interpretation of these guidelines and standards, or in special circumstances, applicants may request a review of any division decision by a panel of board members. All of the actions of the director and board are subject to judicial review.

(3) In accordance with Section 53-3-303(8), the board shall administer the functional ability and safety assessment guidelines, which are intended to minimize such conflicts as the individual's desire to drive and the community's desire for highway safety.

R708-7-8. Persons Authorized to Complete Functional Ability Evaluation Medical Report Form.

(1) Physicians and surgeons licensed to practice medicine may complete the entire Functional Ability Evaluation Medical Report form.

(2) Nurse practitioners and physician assistants, and in accordance with 49 CFR 391.43, physician assistants, advanced practice nurses, doctors of chiropractic and other health care professionals, may perform physical examinations and report their findings on the Functional Ability Evaluation Medical Report form provided that:

(a) they are licensed by the state as health care professionals;

(b) the physical examination does not require advanced or complex diagnosis or treatment; and

(c) in the event that advanced or complex medical diagnostic analysis is required, the licensed health care professional, consistent with sound medical practices, will be expected to promptly refer the patient to the appropriate physician, surgeon or doctor of osteopathy for further evaluation and for completion of the functional ability evaluations certifications report in those categories.

R708-7-9. Safety Assessment Level Categories.

Functional ability of a driver to operate a vehicle safely may be affected by a wide range of physical, mental or emotional impairments. To simplify reporting and to make possible a comparison of relative risks and limitations, the Medical Advisory Board has adopted physical, emotional and behavioral safety assessment levels as defined in 12 separate categories, with multiple levels under each category.

R708-7-10. Use of the Safety Assessment Level.

(1) Health care professionals who evaluate their patients' health status for purposes of the patient obtaining a Utah driver license, shall report safety assessment levels on forms provided by the division.

(2) In assessing patient health and completing these report forms, health care professionals shall apply the standards and related information contained in the following lists, charts, and tables, which standards and guidelines are referred to in a booklet entitled, "Functional Ability in Driving: Guidelines And Standards for Health Care Professionals." Specific categories are:

(a) "Category A" - diabetes and other metabolic conditions; narrative listing and table;

(b) "Category B" - cardiovascular; narrative listing and table;

(c) "Category C" - pulmonary; narrative listing and table;

(d) "Category D" - neurologic; narrative listing and table;

(e) "Category E" - epilepsy and other episodic conditions; narrative listing and table;

(f) "Category F" - learning, memory and communications; narrative listing and table;

(g) "Category G" - psychiatric or emotional conditions; narrative listing and table;

(h) "Category H" - alcohol and other drugs; narrative listing and table;

(i) "Category I" - visual acuity; narrative listing and table;

(j) "Category J" - musculoskeletal abnormality or chronic medical debility; narrative listing and table;

(k) "Category K" - alertness or sleep disorders; narrative listing and table; and

(L) "Category L" - hearing and balance; narrative listing and table.

(3) Copies of these guidelines are printed in a booklet and distributed by the division in addition to being published on the Driver License Division webpage. These booklets may be obtained at no cost for health care professionals or \$5 per booklet for all other individuals. Copies may be obtained in person or by written request to the Driver License Division Medical Section at P.O. Box 144501, Salt Lake City, Utah 84114-4501.

(4) Report forms completed by a health care professional and received by the division are to be used as a screening tool in assessing an individual's ability to safely operate a motor vehicle.

(a) Some safety assessment levels as identified in the "Functional Ability in Driving: Guidelines And Standards for Health Care Professionals", may result in the division requesting an individual to complete a driver review, which may include a driving skills test in order to demonstrate the ability to safely operate a motor vehicle before determining whether the individual will maintain the privilege to drive. In some cases when a privilege to drive is granted, driving restrictions may be required in order to ensure public safety.

(b) A health care professional may also request that the division evaluate an individual's driving skill level at the health care professional's discretion.

(5) The division shall notify an individual that their privilege to drive is denied upon receipt of the following:

(a) a medical report that is completed in the categories A, B, C, D, E, F, G, H, J, K, or L, for which the driver is assessed at a level "8" in accordance with the "Functional Ability in Driving: Guidelines And Standards for Health Care Professionals", or other documentation which indicates that the health care professional recommends that the individual does not drive; or

(b) a medical report that is completed in the category I for which the driver is assessed at a level "10" in accordance with the "Functional Ability in Driving: Guidelines And Standards for Health Care Professionals", or other documentation which indicates that the health care professional recommends that the individual does not drive.

(6) Upon receipt of a notice of denial of the privilege to drive, an individual may request a review of the division's decision by a panel of board members. All of the actions of the director and board are subject to judicial review.

KEY: administrative procedures, health care professionals,
physicians
March 10, 2015
Notice of Continuation January 9, 2012
53-3-224
53-3-303
53-3-304
49 CFR 391.43

R708. Public Safety, Driver License.
R708-32. Uninsured Motorist Identification Database.
R708-32-1. Purpose.

The purpose of this rule is to establish procedures for administering and enforcing the uninsured motorist identification database program in accordance with Subsection 41-12a-803.

R708-32-2. Authority.

This rule is authorized by 41-12a-803.

R708-32-3. Definitions.

(1) Definitions in this rule are found in Subsection 41-12a-802.

R708-32-4. Access.

(1) In accordance with Section 41-12a-803, insurance information will be provided only to authorized personnel of:

(a) federal, state and local governmental agencies who have access through the Utah Criminal Justice Information System to Driver License and Motor Vehicle Division's computer information for law enforcement purposes;

(b) financial institutions, as defined in Section 7-1-103, for the purpose of protecting a bona fide security interest in a motor vehicle;

(c) the Driver License Division for the purpose of verifying automobile insurance coverage as authorized by the Division Director; and

(d) the Department of Motor Vehicle for the purpose of verifying automobile insurance coverage.

R708-32-5. Insurance Information.

(1) The insurance response may be retrieved from the uninsured motorist database or from a web service inquiry to insurance companies, whichever provides the most current and accurate information.

(2) Authorized personnel seeking information from this database will be limited to receiving responses which are adopted and incorporated within this rule by reference and are referred to in a document entitled, "Uninsured Motorist Database Query Responses".

(3) The Driver License Division, Utah Department of Public Safety, shall make available to authorized personnel for review and inspection at the division office, reception desk, 4501 South 2700 West, Salt Lake City, Utah 84130-0560 a copy of the "Uninsured Motorist Database Query Responses" document. Copies may be obtained in person or by written request to the Driver License Division Financial Responsibility Section at P.O. Box 144501, Salt Lake City, Utah 84114-4501.

KEY: uninsured motorist database

June 30, 2013

Notice of Continuation March 10, 2015

41-12a-803

31A-22-315.5

R708. Public Safety, Driver License.**R708-36. Disclosure of Personal Identifying Information in MVRs.****R708-36-1. Purpose.**

One of the responsibilities of the division is to compile information regarding the driving record of licensed drivers in Utah. This information is searched, compiled and summarized by the division in a report called a Motor Vehicle Record (MVR). The MVR contains certain personal identifying information and is protected from public disclosure for privacy reasons in accordance with the federal Driver Privacy Protection Act of 1994 (DPPA), Section 53-3-109 and Title 63G, Chapter 2 (Government Records Access and Management Act). However, such laws provide for limited public disclosure of such information because the Division Director has determined it is in the best interest of public safety in order to protect the public against fraud and misuse of the MVR. It is the purpose of this rule to set forth the contents of the MVR and the procedure to be followed in disclosing it.

R708-36-2. Authority.

This rule is authorized by Section 53-3-109(5).

R708-36-3. Content of MVRs.

(1) The personal identifying information contained in an MVR consists of the driver name, driver license number, and in certain circumstances, the driver address.

(2) The driver name and driver license number will appear on every MVR released by the division to qualified requesters.

(3) Driver address will appear only on MVRs released to licensed private investigators or investigative agencies certified by the Department of Public Safety. The division may make exceptions to this procedure, provided the exception falls under a permissible use set forth in the DPPA.

(4) All MVRs will contain the driver's 5-digit zip code, date of birth, military status, license status, license issue/expiration dates, license class, endorsements, reportable arrests, convictions, reportable department actions, and reportable failure to appear/comply notations.

R708-36-4. Disclosure Procedure.

(1) When properly requested to do so the division will search its driver license files and then compile and furnish an MVR on any person licensed in the state.

(2) MVRs shall only be released to qualified requesters in accordance with the DPPA.

(3) In order to receive an MVR, the requester must:

(a) provide acceptable proof of identification such as a driver license, official identification card, or other official documentation. The division may also require other forms of identification as needed;

(b) declare one or more permissible uses within the DPPA under which the requester is qualified to receive the information. The division will provide a list of the permissible uses for the requester to review if necessary. The division may determine that the requester is not entitled to receive an MVR if the division has reason to believe the declaration is invalid, or that any other condition in this rule has not been met;

(c) provide sufficient information to locate the driver records;

(d) pay appropriate fees in a manner approved by the division; and

(e) agree to comply with state and federal laws regulating resale and further disclosure of information on an MVR.

R708-36-5. Bulk Requests.

Bulk customers (generally those requesting 50 or more MVRs at a time) may meet the conditions in this rule by contracting with the division.

R708-36-6. Electronic Transactions.

Requests for MVRs may be transacted electronically as approved by the division.

KEY: driver license, motor vehicle record, privacy

June 1, 2000

53-3-109(5)

Notice of Continuation March 10, 2015

R708. Public Safety, Driver License.**R708-37. Certification of Licensed Instructors of Commercial Driver Training Schools or Testing Only Schools to Administer Driving Skills Tests.****R708-37-1. Purpose.**

The purpose of this rule is to establish standards and procedures to certify instructors of commercial driver training schools and testing only schools to administer driving skills tests.

R708-37-2. Authority.

This rule is authorized by Section 53-3-510.

R708-37-3. Definitions.

(1) "Agreement" means a written agreement between the state and a third-party tester agreeing to the conditions contained in this rule.

(2) "Cancellation" means action taken by the division that voids an instructor's testing certification.

(3) "Certification" means the process by which commercial driver training instructors are certified by the division to administer driving skills tests.

(4) "Commercial driver training school" or "school" means a business enterprise conducted by an individual, association, partnership, or corporation for the education and training of persons to drive motor vehicles, and to prepare applicants for examinations prerequisite to their obtaining driver licenses or learner permits.

(5) "Commercial driver training vehicle" means a motor vehicle equipped with a second functioning foot brake and inside and outside mirrors which are positioned for use by the instructor for the purpose of observing rearward.

(6) "Corporation" means a business incorporated under the laws of a state or other jurisdiction.

(7) "Division" means the Driver License Division of the Utah Department of Public Safety.

(8) "Instructor" means a person who is authorized to teach driver education in an approved commercial driver training school.

(9) "Partnership" means an association of two or more persons who co-own and operate a commercial driver training school or a testing only school.

(10) "Probation" means action taken by the department which includes a period of close supervision as determined by the division.

(11) "Suspension" means action taken by the division that temporarily voids an instructor's testing certification. The certification may be reinstated whenever the instructor follows a division-approved plan and complies with reinstatement procedures.

(12) "Test" means a driving skills test approved by the division.

(13) "Tester" means an instructor who is certified to administer driving skills tests.

R708-37-4. Application Procedures.

(1) An instructor shall become a certified tester by making application and by meeting the requirements of this rule. In order to become a certified tester, an individual must be certified as a commercial driver education instructor in accordance with R708-2-6,8 and 9. Application shall be made on a form furnished by the division and shall include the following information:

(a) the name of the instructor who is applying for tester certification;

(b) the name and address of the commercial driver training or testing only school where the instructor is employed; and

(c) the signature of the school owner indicating approval of the instructor for tester certification and consent to the use of school vehicles, facilities, etc. for the purpose of testing.

(2) The instructor must enter into a written agreement with the division. The agreement must contain provisions that:

(a) the tester cannot maintain employment with more than one commercial driver training school or testing only school at a time;

(b) allow the division to conduct random examinations, inspections, and audits without prior notice during normal business hours; and

(c) allow the division to conduct on-site inspections annually or when deemed necessary by the division.

(3) The division will offer training to instructors regarding minimum standards which must be met in the administration and scoring of tests.

(4) The division may authorize, train, and approve persons outside the division to provide the training. Instructors are responsible for any costs associated with training provided by approved organizations, agencies, or individuals.

(5) The division shall maintain a list of approved testers and shall assign testers identification numbers.

R708-37-5. Medical Screening.

(1) Prior to administering a driving skills test, the tester shall screen students for visual acuity, visual field and physical or emotional conditions which may compromise public safety. Screening may not be performed over the telephone. An employee of the tester who is not certified as an instructor or tester may not perform medical or visual screening unless approved in writing by the division.

(a) Students must have 20/40 or better visual acuity in one eye and a visual field of 90 degrees. Students with less than the required visual acuity and/or visual field shall be referred to a licensed medical practitioner for further consideration.

(b) Students must answer all questions on a health questionnaire approved by the Driver License Medical Advisory Board and sign a statement of affirmation of truth. Students indicating a physical or emotional condition on the questionnaire shall be referred to a licensed medical practitioner for further consideration. Health questionnaires shall be provided by the division and maintained for three years by the commercial driver training school or testing only school as a part of the school's records.

(c) The driver will not be required to submit to a medical screening if one of the following is provided to the tester:

(i) a verification of medical fitness approval form as completed by a commercial driver education instructor; or

(ii) a driver receipt issued by the division that indicates that the medical screening has taken place in the division.

R708-37-6. Tests.

(1) When testing students for driver licenses, instructors certified as testers shall administer tests developed in accordance with these rules which meet or exceed minimum division testing standards.

(2) Tests shall be conducted:

(a) on test routes approved by the division;

(b) by certified testers who are also certified instructors;

(c) in vehicles provided by commercial driver training schools or testing only schools which have been inspected and approved for use in driver training by the division or in a personal vehicle provided by the applicant. Each school shall notify the division of any vehicle added to or deleted from their fleet. No vehicle owned by a commercial driver training school or testing only school may be used for testing until it passes an inspection by the division;

(d) using division approved content, forms, and scoring procedures;

(e) only for students who have completed a course of driver education or who have had a previous driver license;

(f) with only the student and the tester occupying the vehicle. The tester shall be seated next to the student. No other passengers or observers shall occupy the vehicle during the test, except upon approval and written consent by the division; and

(g) only for students who have in their possession a temporary driving permit, a learner permit, an instruction permit issued by the division; or a valid driver license issued by a jurisdiction other than the State of Utah.

(h) only for students who have in their possession adequate verification of their identity.

(3) a tester may not make any changes to a testing route without prior written approval by the division.

(4) a tester shall not employ an employee of the division as a tester.

R708-37-7. Test Requirements.

(1) A tester may not administer a skills test to a student who:

(a) completed the driver training course at the same commercial driver training school or testing only school in which the tester is employed as an instructor; or

(b) completed the driver training course at a commercial driver training school that is owned completely or partially by an individual or individuals who possess any ownership in the school in which the tester is employed as an instructor.

(2) A student who fails the skills test given by a tester may:

(a) apply to the same tester for additional testing;

(b) apply to a different tester for additional testing; or

(c) complete the skills test at a division office.

(3) The written test shall be administered by the division.

R708-37-8. Notification of Accident.

If any vehicle is involved in an accident during the driving skills test the tester shall notify the division of the accident in a written report on a form supplied by the division within five working days of the date of the accident. If damages are \$1,000 or more, the accident must also be reported to the local law enforcement agency. A copy of the officer's report shall also be submitted to the division when available.

R708-37-9. Evidence of Test Completion.

(1) The tester shall furnish a certificate of test completion to the student in a sealed envelope with the tester's signature signed over the seal. The certificate shall be a form approved by the division and shall contain the results of tests taken, the signature and certification number of the tester who administered the tests, and the dates the tests were completed. The test results are valid for a period of one year from the test completion date.

(2) The tester shall provide the student with a receipt each time money is paid by the student to the tester. The tester shall maintain a copy of all receipts.

(3) A student, under this rule, must submit a certificate of completion of a driver education course and a certificate of successful test completion, issued by a tester, to the division and make an application in order to obtain a Class D Driver License.

(4) The commercial driver training school or testing only school shall maintain records of all tests administered for a period of three years. Records shall be maintained in separate files for each tester for auditing purposes. The records shall be subject to inspection by the division during business hours.

R708-37-10. Monthly Reports.

(1) Each third-party tester shall submit to the division a monthly report containing the number of tests administered each month.

(2) Monthly reports shall be submitted on forms supplied by the division and must be received by the division no later than the 10th day of each month following the month in which the testing occurred.

(3) Failure to submit monthly reports within the prescribed time is grounds for suspension or cancellation of the third-party tester's certification.

(4) Monthly reports may be submitted electronically with division approval.

R708-37-11. Refusal to Certify, Grounds for Cancellation, Suspension, or Probation of a Tester's Certification.

(1) The division may refuse to certify tester applicants who do not meet the standards for training or who submit an application that contains false or incomplete information.

(2) The tester certification shall remain effective as long as the tester retains the status of instructor for a commercial driver training school or testing only school or until the tester certification is canceled or suspended by the division. A commercial driver training school or testing only school may initiate suspension or cancellation of the testing certification held by one of their instructors by providing the division with acceptable written justification.

(3) The tester certification shall be canceled or suspended upon cancellation, revocation, denial of issuance of renewal of the tester's instructor certification. Grounds for cancellation or suspension of the tester certification shall include all items listed in R708-2-25.

(4) Certification may be canceled or suspended for non-compliance with these rules.

(5) Certification may be canceled or suspended for failure to participate in any in-service training required by the division.

(6) Certification may be canceled or suspended when a third-party tester's personal driver license has been denied, suspended, revoked, canceled, or disqualified. The tester shall be required to notify the division in writing within five working days of any action taken against the tester's driving privilege.

(7) When the division determines it is necessary to cancel, suspend, or place on probation a tester's certification, it shall determine an appropriate course of action from the following options:

(a) probation, with terms that must be met and adhered to by the tester;

(b) suspension, pending a remedial plan leading to reinstatement; or

(c) cancellation.

(8) Action by the division to cancel, suspend, place on probation or refuse to issue a tester certification is designated as an informal adjudicative proceeding under the Utah Administrative Procedures Act, Section 63G-4-202.

(9) The following procedures will govern informal adjudicative proceedings:

(a) action by the division to cancel, revoke, place on probation or refuse to issue a certification will be commenced by the division by the issuance of a notice of agency action. The notice of agency action will comply with the provisions of Section 63G-4-201;

(b) no response is required to the notice of agency action;

(c) an opportunity for a hearing will be granted on a cancellation, revocation, probation or refusal to issue a certification if, within five days, the division receives a request for a hearing;

(d) the tester will receive written notice of the hearing at least ten days prior to the date of the hearing;

(e) no discovery, either compulsory or voluntary, will be permitted prior to the hearing except that all parties shall have access to information contained in the division's files, and to investigatory information and materials not restricted by law;

(f) the hearing shall be conducted by an individual, or panel designated by the division; and

(g) within twenty days after the close of the hearing or after the failure of a party to appear for the hearing, the individual conducting the hearing shall issue a written decision which shall constitute final agency action. The written decision shall state the decision, the reason for the decision, notice of right to request reconsideration under Section 63G-4-302, notice of right to judicial review under Section 63G-4-402, and the time limits for filing an appeal to the appropriate district court.

(10) Reinstatement following cancellation of certification shall consist of completing an approved training plan and making application for a new certification. Instructors and testers must have a driving record free of suspensions or revocations of their driving privilege resulting from moving violations, chargeable accidents, and drug or alcohol related offenses, in all states, for a two year period immediately prior to application and during employment.

(11) Certification shall be canceled when testers are no longer employed as instructors in commercial driver training schools or testing only schools. Testers who discontinue employment as instructors with a commercial driver training schools or testing only school and subsequently return to instruct and test under the sponsorship of a different commercial driver training schools or testing only school must make a new application with the division for a new instructor certification and tester certification. If the period of cancellation of testing certification exceeds six months the applicant shall complete a course of approved training.

R708-37-12. Advertising.

(1) No advertisement shall indicate in any way that a commercial driver training schools or testing only school or a tester can issue or guarantee the issuance of a driver license, or imply that the testing program, except for reporting test scores, can in any way influence the division in the issuance of a Class D driver license; or imply that preferential or advantageous treatment can be obtained from the division through participation in their testing program.

(2) No tester, employee, or agent of a commercial driver training schools or testing only school shall be permitted to advertise or solicit business or cause business to be solicited in its behalf, 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.

KEY: driver training, skills tests

August 18, 2003

53-3-510

Notice of Continuation March 10, 2015

R708. Public Safety, Driver License.**R708-40. Driving Simulators.****R708-40-1. Purpose.**

The purpose of this rule is to define standards for driving simulators for use in conjunction with driver training.

R708-40-2. Authority.

This rule is authorized by Subsection 53-03-505(1)(d).

R708-40-3. Definitions.

In addition to terms defined in 53-3-102,

(1) "Operator interaction" means a condition whereby a student driver operates simulation equipment that reacts and adjusts to the student's eye, hand, foot and operation.

(2) "Field of view" means the ability to see to the right, left as well as the center of a persons visual perspective, such as a "panoramic visual field".

R708-40-4. Standards for Driving Simulators.

(1) A fully interactive driving simulation device shall:

(a) provide for operator interaction by use of equipment that is substantially the same in overall physical size, function and construction characteristics as the controls and seating mechanisms found in an actual passenger motor vehicle;

(b) visually display the resulting vehicle positioning and effect of individualized operator interaction relative to the simulated visual and aural scenario in a manner that is substantially similar to typical conditions found in an actual passenger motor vehicle;

(c) be capable of maintaining a visual scene that changes in response to operator or instructor movements, and approximates a field of view that a student would experience if seated in the driver seat of an actual passenger motor vehicle;

(d) present a field of view that enables the operator to observe a driving condition of that operator's driving into an intersection and visually scanning both directions of traffic with proper head movements;

(e) present other vehicles in a simulated visual scenarios that can be readily perceived as behaving in a manner consistent with real-world driving experience;

(f) enable a student to physically respond to simulated visual scenarios in the areas of vehicle control, awareness, and general-rules-of-the-road which are listed in the Utah Driver Handbook. These include: signaling, proper use of lanes, turning, lane changes, overtaking and passing, right of way, response to emergency vehicles, allowances for pedestrians, stopping, parking, navigating a vehicle through highway work zones, traffic signs, signals and road markings, and pavement markings;

(g) provide an active physically felt, steering-wheel resistance as feedback to the student, that is similar to conditions typically experienced while operating an actual passenger motor vehicle;

(h) provide an instructor with information drawn from monitoring, assessment, feedback and storage of training performance data; and which

(i) imitate and model Utah driving conditions and environment.

(2) A non-fully interactive driving simulation device shall conform to the above description of a full interactive driving simulation device, except that it does not present a student with a panoramic "side and front" field of view, is used by two or more students, or does not provide an individual student's performance information as feedback to the student.

(3) A driving simulator that does not conform to the characteristics as outlined in Section R708-40-4(1) above, is not acceptable as a fully interactive driving simulator in a driver education program as in accordance with Section 53-3-505.5(2)(b).

(4) A driving simulator that does not conform to the characteristics as outlined in Section R708-40-4(2) above, is not

acceptable as a non-fully interactive driving simulator in a driver education program as in accordance with Section 53-3-505.5(2)(c).

KEY: driving simulators

April 18, 2005

Notice of Continuation March 10, 2015

53-3-505

R708. Public Safety, Driver License.**R708-41. Requirements for Acceptable Documentation, Storage and Maintenance.****R708-41-1. Authority.**

This rule is authorized by Section 53-3-104.

R708-41-2. Purpose.

The purpose of this rule is to define acceptable documentation for a Utah license certificate or Utah Identification card and to establish procedures for storage and maintenance of those documents pursuant to Title 53, Chapter 3.

R708-41-3. Definitions.

(1) "Acceptable Document" means an original document or a copy certified by the issuing agency, which the division accepts for determining the validity of information submitted in connection with a license certificate or identification card (ID card) application which may include but is not limited to, the applicant's identification, legal/lawful presence, social security number (SSN) or ineligibility to obtain a social security number as a result of the applicant's legal/lawful presence status, individual tax identification number (ITIN) or the Utah residence address. Any document that has been or appears to have been duplicated, traced over, mutilated, defaced, tampered with, or altered in any manner or that is not legible may not be accepted for licensing and identification card purposes.

(2) "Alternate Document" means a document that may be accepted when the applicant is, for reasons beyond their control, unable to present all necessary documents to establish identity or date of birth as required in definition (6)(a) or U.S. Citizenship as required for proof of legal/lawful presence in definition (8)(a) subject to approval by the Department of Homeland Security (DHS) or the division director or designee.

(3) "Driving Privilege Card" (DPC) means a driving certificate that may only be issued to an applicant who meets the requirements of definition (14) for an undocumented immigrant.

(4) "Exception Process" means a written, defined process for persons who, for reasons beyond their control, are unable to present all necessary documents and must rely on alternate documents to establish identity, date of birth or U.S. Citizenship.

(5) "Full Legal Name Evidence" means the name established on the identity document referenced in definition (6). Any name variation from the original or certified document(s) must be accompanied by legal authorizing documentation, except that, the name established on the division's database may be considered to be the full legal name unless otherwise determined by the division. Upon application for any license certificate or ID card, a change of the applicant's full legal name must be accompanied by an acceptable document which authorizes the name change.

(6) "Identity Document" means an original, government-issued document which contains identifying information about the subject of the document including the full legal name and date of birth or a document approved by DHS or the division director or designee. A copy of an original document must be certified by the issuing agency.

(a) Group A documents are acceptable for applicants for a regular driver license, Commercial Driver License (CDL) or ID card referenced in definition (9)(a):

(i) Valid, unexpired U.S. passport or passport card which may provide evidence of both legal/lawful presence and identity;

(ii) Certified copy of a birth certificate filed with the State Office of Vital Statistics or equivalent agency in the individual's State of birth which may provide evidence of both legal/lawful presence and identity;

(iii) Consular Report of Birth Abroad (CRBA) issued by the U.S. Department of State, Form FS-240, DS-1350 or FS-545 which may provide evidence of both legal/lawful presence and identity;

(iv) Valid, unexpired Permanent Resident Card, Form I-551, which may provide evidence of both legal/lawful presence and identity;

(v) Certificate of Naturalization issued by DHS, Form N-550 or Form N-570, which may provide evidence of both legal/lawful presence and identity;

(vi) Certificate of Citizenship, Form N-560 or Form N-561, issued by DHS which may provide evidence of both legal/lawful presence and identity;

(vii) Regular Utah driver license, CDL or ID card that has been issued on or after January 1, 2010 is only acceptable for renewal or duplicate certificates and may provide evidence of both legal/lawful presence and identity; or

(viii) Alternate documents may be accepted if approved by DHS or the division director or designee.

(b) Group B documents are acceptable for applicants for a limited-term driver license, limited-term CDL or limited-term ID card referenced in definition (9)(b):

(i) Unexpired employment authorization document (EAD) issued by DHS, Form I-766, or Form I-688B verified through the Systematic Alien Verification for Entitlements system (SAVE) which may provide evidence of both legal/lawful presence; or

(ii) Unexpired foreign passport with documentary evidence of the applicant's most recent admittance into the United States verified through SAVE which may provide evidence of both legal/lawful presence.

(c) Group C documents are acceptable for applicants for a DPC referenced in definition (14) and at least one of the documents listed below must be presented with a foreign birth certificate including a certified translation if the birth certificate is not in English or a foreign passport including a certified translation if the passport is not in English:

- (i) Church records;
- (ii) Court records;
- (iii) Driver License;
- (iv) Employee ID;
- (v) Insurance ID card;
- (vi) Matricular Consular Card (issued in Utah);
- (vii) Mexican Voter Registration card;
- (viii) School records;
- (ix) Utah DPC;
- (x) Other evidence considered acceptable by the division director or designee.

(7) "Individual Tax Identification Number (ITIN) Evidence" means an official document(s) used to verify an individual's assigned ITIN including:

- (a) ITIN card issued by the Internal Revenue Service (IRS);

or

- (b) Document or letter from the IRS verifying the ITIN.

(8) "Legal/lawful Presence or Status" means that an individual's presence in the United States does not violate state or federal law and includes:

(a) Group A applicants who may qualify for a regular driver license, CDL or ID card if they are a:

- (i) United States citizen;
- (ii) National of the United States of America; or
- (iii) Legal Permanent Resident Alien.

(b) Group B applicants who may qualify for a limited-term driver license, limited-term CDL, or limited-term ID card if they are an immigrant who has:

- (i) Unexpired immigrant or nonimmigrant visa status for admission into the United States;
- (ii) Pending or approved application for asylum in the United States;
- (iii) Admission into the United States as a refugee;
- (iv) Pending or approved application for temporary protected status in the United States;
- (v) Approved deferred action status;
- (vi) Pending application for adjustment of status to legal permanent resident or conditional resident; or
- (vii) Conditional permanent resident alien.

(9) "Legal/Lawful Presence or Status Evidence" means a document(s) issued by the United States Government or approved by DHS or the division director or designee which shows legal presence of an individual including:

(a) Group A documents are acceptable for applicants referenced in definition (8)(a) for a regular driver license, CDL, or ID card:

(i) Valid, unexpired U.S. passport or passport card which may provide evidence of both legal/lawful presence and identity;

(ii) Certified copy of a birth certificate filed with the State Office of Vital Statistics or equivalent agency in the individual's State of birth which may provide evidence of both legal/lawful presence and identity;

(iii) Consular Report of Birth Abroad (CRBA) issued by the U.S. Department of State, Form FS-240, DS-1350 or FS-545 which may provide evidence of both legal/lawful presence and identity;

(iv) Valid, unexpired Permanent Resident Card, Form I-551, which may provide evidence of both legal/lawful presence and identity;

(v) Certificate of Naturalization issued by DHS, Form N-550 or Form N-570, which may provide evidence of both legal/lawful presence and identity;

(vi) Certificate of Citizenship, Form N-560 or Form N-561, issued by DHS which may provide evidence of both legal/lawful presence and identity;

(vii) Regular Utah driver license, CDL or ID card that has been issued on or after January 1, 2010 is only acceptable for renewal or duplicate certificates and may provide evidence of both legal/lawful presence and identity; or

(viii) Alternate documents may be accepted if approved by DHS or the division director or designee.

(b) Group B documents are acceptable for applicants referenced in definition (8)(b) for a limited-term driver license, limited-term CDL or limited-term ID card with verification from SAVE:

(i) Unexpired employment authorization document (EAD) issued by DHS, Form I-766 or Form I-688B;

(ii) Unexpired foreign passport with documentary evidence of the applicant's most recent admittance into the United States;

(iii) A document issued by the U.S. Federal Government that provides proof of one of the statuses listed below verifies lawful entrance into the United States of America:

(A) Unexpired immigrant or nonimmigrant visa status for admission into the United States issued by the U.S. Federal Government;

(B) Pending or approved application for asylum in the United States;

(C) Admission into the United States as a refugee;

(D) Pending or approved application for temporary protected status in the United States;

(E) Approved deferred action status;

(F) Pending application for adjustment of status to legal permanent resident or conditional resident; or

(G) Conditional permanent resident alien.

(10) "SAVE Verification" means a document issued by the U.S. Federal government has been verified through the DHS SAVE, or such successor or alternate verification system approved by the Secretary of Homeland Security.

(11) "Social Security Number Evidence" means an official document(s) used to verify an individual's assigned U.S. Social Security Number (SSN) and may be verified through the Social Security On-Line Verification system (SSOLV) during every application process and includes:

(a) Social Security card issued by the U.S. government that has been signed or,

(b) If the Social Security card is not available, the applicant may present one of the following documents which contain the applicant's name and SSN:

(i) W-2 form;

(ii) SSA-1099 form;

(iii) Non SSA-1099 form;

(iv) Pay stub showing the applicant's name and SSN; or

(v) Other documents approved by DHS or the division director or designee.

(12) "Social Security Number Ineligibility" means an individual is ineligible to receive a Social Security Number as a result of their legal/lawful presence status.

(13) "Social Security Number Ineligibility Evidence" means letter from the Social Security Administration indicating the individual is not eligible to receive a Social Security Number as a result of their legal/lawful presence status.

(14) "Undocumented Immigrant" means a person who does not meet the qualifications outlined in definition (8) and does not possess the documentation outlined in definition (9) and is only eligible for a DPC.

(15) "U.S. Citizen" means a native or naturalized person of the United States of America.

(16) "Utah Residence Address" means the place where an individual has a fixed permanent home and principal establishment in Utah and in which the individual voluntarily resides, that is not for a special or temporary purpose. Under unique situations that require an individual to be under temporary care, custody, or treatment of a government, public, or private business the division may authorize the sponsoring agency to sign an affidavit verifying the residence of the applicant. Upon approval of the division director or designee, the division will recognize the sponsoring agency's address as the Utah residence address of the applicant.

(17) "Utah Residence Address Evidence" means the Utah residence address recorded on the Utah Driver License Division database unless otherwise determined by the division or, upon application for a Utah license certificate or ID card if the applicant's Utah residence address has not been recorded by the division or has changed from what is recorded on the division's database, two documents which display the applicant's name and principle Utah residence address including:

(a) Bank statement (dated within 60 days);

(b) Court documents;

(c) Current mortgage or rental contract;

(d) Major credit card bill (dated within 60 days);

(e) Property tax notice (statement or receipt dated within one year);

(f) School transcript (dated within 90 days);

(g) Utility bill (billing date within 60 days), cell phone bills will not be accepted;

(h) Valid Utah vehicle registration or title;

(i) Other documents acceptable to the division upon review, except that only one document printed from the internet may be accepted.

(18) "Veteran indicator" means the word VETERAN will be added to specific driver license certificates and identification certificates during the application process at the applicant's request and upon the applicant providing proof of an honorable discharge from the United States military in the form of a DD214 or other documents, if approved by the division director or designee.

R708-41-4. Obtaining a Utah Learner Permit, Provisional License Certificate, Regular License Certificate, Limited-Term License Certificate, Driving Privilege Card, CDL Certificate, Limited-Term CDL Certificate, Identification Card, or Limited-Term Identification Card.

(1) An individual who is applying for a Learner Permit must provide the following documents:

(a) One legal/lawful presence document as outlined in definition (9)(a) and one identity document as outlined in definition (6)(a); or

(b) One legal/lawful presence document as outlined in definition (9)(b) and one identity document as outlined in definition (6)(b); or

(c) Two identity documents as outlined in definition (6)(c) for undocumented immigrants; and

(d) Evidence of their SSN as outlined in definition (11), or evidence of their ineligibility to obtain a SSN as outlined in definition (12), or evidence of their ITIN as outlined in definition (7); and

(e) Evidence of their current Utah residence address as outlined in definition (17).

(2) An individual who is applying for a provisional license certificate, regular license certificate, CDL certificate, or identification card must provide the following documents, except that an applicant for an identification card does not need to comply with (2)(e):

(a) One legal/lawful presence document as outlined in definition (9)(a), unless previously recorded by the division during an application process on or after January 1, 2010; and

(b) One identity document as outlined in definition (6)(a), unless previously recorded by the division during an application process on or after January 1, 2010; and

(c) Evidence of their SSN as outlined in definition (11), unless previously recorded by the division during an application process on or after January 1, 2010, or evidence of ineligibility to obtain a SSN as outlined in definition (12), except that applicants for an original CDL must provide their Social Security card; and

(d) Evidence of their current Utah residence address as outlined in definition (17); and

(e) Evidence of completion of a course in driver training approved by the commissioner, or evidence that the individual was issued a driving privilege in another state or country if younger than 19 years of age.

(f) CDL applicants must provide a current DOT Medical card.

(3) An individual who is applying for a renewal of a regular license certificate, provisional license certificate, or CDL certificate card must provide the following documents:

(a) One legal/lawful presence document as outlined in definition (9)(a), unless previously recorded by the division during an application process on or after January 1, 2010; and

(b) One identity document as outlined in definition (6)(a), unless previously recorded by the division during an application process on or after January 1, 2010; and

(c) Evidence of their SSN as outlined in definition (11), unless previously recorded by the division during an application process on or after January 1, 2010, or evidence of ineligibility to obtain a SSN as outlined in definition (12); and

(d) Evidence of their current Utah residence address as outlined in definition (17).

(4) An individual who is applying for a duplicate of a regular license certificate, a provisional license certificate, or CDL certificate must provide the following documents:

(a) One legal/lawful presence document as outlined in definition (9)(a), unless previously recorded by the division during an application process on or after January 1, 2010; and

(b) One identity document as outlined in definition (6)(a), unless previously recorded by the division during an application process on or after January 1, 2010; and

(c) Evidence of their SSN as outlined in definition (11), unless previously recorded by the division during an application process on or after January 1, 2010, or evidence of ineligibility to obtain a SSN as outlined in definition (12); and

(d) Evidence of their current Utah residence address as outlined in definition (17).

(5) An individual who is applying for a limited-term license certificate, limited-term provisional certificate, limited CDL certificate, or limited-term identification card must provide the following documents, except that an applicant applying for a limited-term identification card does not need to comply with (5)(e):

(a) One legal/lawful presence document as outlined in definition (9)(b); and

(b) One identity document as outlined in definition (6)(b) unless previously recorded by the division during an application process on or after January 1, 2010; and

(c) Evidence of their SSN as outlined in definition (11), unless previously recorded by the division during an application process on or after January 1, 2010, or evidence of ineligibility to obtain a SSN as outlined in definition (12), except that applicants for an original limited-term CDL must provide their Social Security card; and

(d) Evidence of their current Utah residence address as outlined in definition (17); and

(e) Evidence of completion of a course in driver training approved by the commissioner, or evidence that the individual was issued a driving privilege in another state or country if younger than 19 years of age.

(6) An individual who is applying for a renewal of a limited-term license certificate, a limited-term provisional license certificate, or limited-term CDL certificate must provide the following documents:

(a) One legal/lawful presence document as outlined in definition (9)(b); and

(b) One identity document as outlined in definition (6)(b) unless previously recorded by the division during an application process on or after January 1, 2010; and

(c) Evidence of their SSN as outlined in definition (11), unless previously recorded by the division during an application process on or after January 1, 2010, or evidence of ineligibility to obtain a SSN as outlined in definition (12); and

(d) Evidence of their current Utah residence address as outlined in definition (17);

(7) An individual who is applying for a duplicate of a limited-term license certificate, a limited-term provisional license certificate or a limited-term CDL certificate, must provide the following documents:

(a) One legal/lawful presence document as outlined in definition (9)(b); and

(b) One identity document as outlined in definition (6)(b) unless previously recorded by the division during an application process on or after January 1, 2010; and

(c) Evidence of their SSN as outlined in definition (11), unless previously recorded by the division during an application process on or after January 1, 2010, or evidence of ineligibility to obtain a SSN as outlined in definition (12); and

(d) Evidence of their current Utah residence address as outlined in definition (17);

(8) An individual who is applying for a Driving Privilege card must provide the following documents:

(a) Two identity documents as outlined in definition (6)(c) for undocumented immigrants unless previously recorded by the division during an application process on or after January 1, 2010; and

(b) Evidence of a SSN as outlined in definition (11); or evidence of an ITIN as outlined in definition (7); and

(c) Evidence of their current Utah residence address as outlined in definition (17); and

(d) Evidence of completion of a course in driver training approved by the commissioner, or evidence that the individual was issued a driving privilege in another state or country if younger than 19 years of age.

(9) An individual who is applying for a renewal of a Driving Privilege card must provide the following documents:

(a) Two identity documents as outlined in definition (6)(c) for undocumented immigrants unless previously recorded by the division during an application process on or after January 1, 2010; and

(b) Evidence of a SSN as outlined in definition (11); or evidence of an ITIN as outlined in definition (7); and

(c) Evidence of their current Utah residence address as outlined in definition (17).

(10) An individual who is applying for a duplicate of a Driving Privilege card must provide the following documents:

(a) Two identity documents as outlined in definition (6)(c) for undocumented immigrants unless previously recorded by the division during an application process on or after January 1, 2010; and

(b) Evidence of a SSN as outlined in definition (11); or evidence of an ITIN as outlined in definition (7); and

(c) Evidence of their current Utah residence address as outlined in definition (17).

(11) An individual who is applying for a limited-term driver license for the first time shall be given the opportunity to take the knowledge test on the state of Utah traffic laws in the person's native language must provide the following documents:

(a) One legal/lawful presence document as outlined in definition (9)(b)(iii)(B) or (C); and

(b) One identity document as outlined in definition (6)(a)(iv); and

(c) Evidence of their SSN as outlined in definition (11) or evidence of ineligibility to obtain a SSN as outlined in definition (12); and

(d) Evidence of their current Utah residence address as outlined in definition (17); and

(e) Evidence of completion of a course in driver training approved by the commissioner, or evidence that the individual was issued a driving privilege in another state or country if the individual is under the age of 19.

R708-41-5. Exceptions.

This rule does not apply when issuing driver license certificates or identification cards in support of Federal, State, or local criminal justice agencies or other programs that require special licensing or identification or safeguard the persons or in support of their official duties.

R708-41-6. Document Storage.

All documents provided to the division by an applicant during a license certificate or identification card application process as proof of identity, proof of lawful/legal presence, proof of SSN, or ineligibility to obtain a SSN, ITIN, address verification, or proof of name change will be imaged and stored in a secure database with controlled access. Except that at the applicant's request the information on a U.S. birth certificate may be written on the license or identification card application rather than scanning the document.

KEY: acceptable documents, identification card, license certificate, limited-term license certificate

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53-3-104

53-3-205

53-3-214

53-3-410

53-3-804

R722. Public Safety, Criminal Investigations and Technical Services, Criminal Identification.

R722-380. Firearm Background Check Information.

R722-380-1. Authority.

This rule is authorized by Subsection 76-10-526(11).

R722-380-2. Definitions.

(1) "Bureau" means the Utah Bureau of Criminal Identification within the Department of Public Safety established by Section 53-10-201.

(2) "Firearm dealer" means any firearm dealer who is licensed as defined in Utah Code Ann. Subsection 76-10-501(7).

(3) "NFA firearm" means a National Firearms Act firearm defined in Title 26 Section 5845 of the United States Code.

R722-380-3. Inquiring Into Denial of Firearm Purchase.

(1)(a) An individual who has been denied the purchase of a firearm by the bureau may inquire why he or she was denied such a purchase by submitting a completed Request for Denial/Research Information form.

(b) The individual may have such denial information released to a third party by submitting a completed Third Party Release Form with a completed Request for Denial/Research Information form.

(2)(a) Within a reasonable time after receiving the completed request form, the Bureau shall release denial information regarding why the individual has been denied the purchase of a firearm, which shall be mailed, e-mailed, or faxed to the individual at the address, e-mail address, or fax number indicated on the request form.

R722-380-4. Law Enforcement Evidence Release.

(1)(a) A law enforcement agency seeking to obtain background clearance information from the bureau prior to releasing a firearm from custody must submit a completed Law Enforcement Evidence Release Form by mail or fax.

(b) Upon receipt of a completed Law Enforcement Evidence Release Form, the bureau shall conduct a thorough background investigation to determine whether the individual, to whom the firearm will be released, meets the requirements to possess a firearm established under Utah Code Ann. Section 76-10-503 and Title 18 Section 922 of the United States Code.

(c) Upon completion of the background investigation, the bureau shall notify the law enforcement agency by fax or telephone, at the number indicated on the release form, whether the individual, to whom the firearm will be released, may possess a firearm.

R722-380-5. Procedures on Background Checks for NFA Firearms.

(1)(a) An applicant seeking to transfer or register an NFA firearm according to Title 26 Chapter 53 of the United States Code must complete the Bureau of Alcohol, Tobacco, Firearms, and Explosives Application for Tax Paid Transfer and Registration of Firearm form and submit to a background check by the bureau as provided in Utah Code Ann. Section 76-10-526.

(b) Upon receipt of a request from a firearm dealer to perform the background check, the bureau shall conduct a thorough background investigation as provided in Utah Code Ann. Section 76-10-526.

(c) Once the background check is complete, the Bureau shall provide a transaction number to the firearm dealer.

(2)(a) After the transaction number has been provided by the bureau, the applicant must submit the Application for Tax Paid Transfer and Registration of Firearm to the Chief Law Enforcement Officer within 20 days in order to verify that a background check has been completed by the bureau.

(b) If the Application for Tax Paid Transfer and Registration of Firearm is not submitted to the Chief Law Enforcement Officer within 20 days after the transaction number has been provided, the individual must re-submit to a background check as provided in Section 76-10-503 to obtain a new transaction number from the bureau.

KEY: firearm purchases, firearm releases, firearm denials,
firearm background check information
March 24, 2015

53-10-201
76-10-526(11)
76-10-526
76-10-503
76-10-501

**R850. School and Institutional Trust Lands, Administration.
R850-21. Oil, Gas and Hydrocarbon Resources.**

R850-21-100. Authorities.

This rule implements Sections 6, 8, 10, and 12 of the Utah Enabling Act, Articles X and XX of the Utah Constitution, and Utah Code Title 53C et seq. which authorize the Director of the School and Institutional Trust Lands Administration to establish rules for the issuance of oil, gas and hydrocarbon leases and management of trust-owned lands and oil, gas and hydrocarbon resources.

R850-21-150. Planning.

Pursuant to Subsection 53C-2-201(1)(a), this category of activity carries no planning obligations by the agency beyond existing rule-based analysis and approval processes. Oil, gas and hydrocarbon development activities are regulated pursuant to R649.

R850-21-175. Definitions.

The following words and terms, when used in Section R850-21 shall have the following meanings, unless otherwise indicated:

1. Act: Utah Code 53C-1 et seq.
2. Agency: School and Institutional Trust Lands Administration or its predecessor agency.
3. Anniversary Date: the same day and month in succeeding years as the effective date of the lease.
4. Assignment(s): a conveyance of all or a portion of the lessee's record title, non-working interest, or working interest in a lease.
 - (a) Certification of Net Revenue Interest: the certification by oath of an assignor to the agency that the total net working revenue interest (NRI) in the lease which the assignment affects has not been reduced to less than 80 per cent of 100 per cent NRI. Certification shall only be required for leases issued after April 1, 2005.
 - (b) Mass Assignment: an assignment that affects more than one lease, including assignments which affect record title, working or non-working interests.
 - (c) Non-Working Interest Assignment: an assignment of interest in production from a lease other than the agency's royalty, the record title, or the working interest including but not limited to overriding royalties, production payments, net profits interests, and carried interests assignments but excluding liens and security interests.
 - (d) Record Title Assignment: an assignment of the lessee's interest in a lease which includes the obligation to pay rent, the rights to assign or relinquish the lease, and the ultimate responsibility to the agency for obligations under the lease.
 - (e) Working Interest Assignment: a transfer of a non-record title interest in a lease, including but not limited to wellbore assignments, but excepting overriding royalty, oil payment, net-profit, or carried interests or other non-working interests.
5. Board of Trustees: the School and Institutional Trust Lands Board of Trustees created under Section 53C-1-202.
6. Bonus Bid: a payment reflecting an amount to be paid by an applicant in addition to the delay rentals and royalties set forth in a lease in an application as consideration for the issuance of such lease.
7. Committed Lands: a consolidation of all or a portion of lands subject to a lease approved by the director for pooling or unitization which form a logical unit for exploration, development or drilling operations.
8. Delay Rental: a sum of money as prescribed in the lease payable to the agency for the privilege of deferring the commencement of drilling operations or the commencement of production during the term of the lease.
9. Designated Operator: the person or entity that has been granted authority by the record title interest owner(s) in a lease and has been approved by the agency to conduct operations on the lease or a portion thereof.

10. Director: the person designated within the agency who manages the agency in fulfillment of its purposes as set forth in the Act.

11. Effective Date: unless otherwise defined in the lease, the effective date shall be the first day of the month following the date a lease is executed by the agency. An amended, extended or segregated lease will retain the effective date of the original lease.

12. Gas Well: a well capable of producing volumes exceeding 100,000 cubic feet of gas to each barrel of oil from the same producing horizon where both oil and gas are produced; or, a well producing gas only from a formation or producing horizon.

13. Lease: an oil, gas and hydrocarbon lease covering the commodities defined in R850-21-200(1) issued by the agency.

14. Lease Year: the twelve-month period commencing at 12:01 a.m. on the month and day of the effective date of the lease and ending on the last day of the twelfth month at 12 midnight.

15. Leasing Unit: a parcel of trust land lying within one or more sections that is offered for lease as an indivisible unit through a competitive oil and gas lease application process which would constitute one lease when issued.

16. Lessee: a person or entity holding a record title interest in a lease.

17. NGL: natural gas liquids.

18. Other Business Arrangement ("OBA"): an agreement entered into between the agency and a person or entity consistent with the purposes of the Act and approved by the Board of Trustees. By way of example, but not of limitation, OBAs may be for farmout agreements or joint venture agreements. An agreement for an OBA may be initiated by the agency or by a proponent of an agreement by filing a proposal for an OBA with the agency.

19. Paying Quantities: the gross income from the leased substances produced and sold (after deduction for taxes and lessor's royalty) that exceeds the cost of operation.

20. Qualified Interest Owner: a person or legal entity who meets the requirements of R850-3-200 of these rules.

21. Rental: the amount due and payable on the anniversary of the effective date of a lease to maintain the lease in full force and effect for the following lease year.

22. Shut-in Gas Well: a gas well which is physically capable of producing gas in paying quantities, but, for which the producible gas cannot be marketed at a reasonable price due to existing marketing or transportation conditions.

23. Shut-In or Minimum Royalty: the amount of money accruing and payable to the agency in lieu of rental or delay rental beginning from the first anniversary date of the lease on or after the initial discovery of oil or gas in paying quantities on the leasehold or the allocation of production to the leasehold. Minimum royalty accrues beginning from the anniversary date of a lease but is not payable until the end of the year. Actual royalty accruing from a lease or allocated to a unitized or communitized lease during the lease year is credited against the minimum royalty obligation for the lease year. If the royalty from production does not equal or exceed the required minimum royalty for the lease year, the lessee is obligated to pay the difference.

24. Surveyed Lot: an irregular part of a section identified by cadastral survey and maintained in the official records of the agency.

25. Trust Lands: those lands and mineral resources granted by the United States in the Utah Enabling Act to the State of Utah in trust, and other lands and mineral resources acquired by the trust, which must be managed for the benefit of the state's public education system or the institutions designated as beneficiaries.

26. UDOGM: the Division of Oil, Gas and Mining of the Utah State Department of Natural Resources.

27. Except as specifically defined above, the definitions set forth at R850-1-200 shall also be applicable.

R850-21-200. Classification of Oil, Gas and Hydrocarbons.

Oil, Gas, and Hydrocarbon leases shall cover oil, natural gas, including gas producible from coal formations or associated with coal bearing formations, and other hydrocarbons (whether the same is

found in solid, semi-solid, liquid, vaporous, or any other form) and also including sulfur, helium and other gases not individually described. The oil, gas, and hydrocarbon category shall not include coal, oil shale, tar sands or gilsonite.

R850-21-300. Lease Application Process.

1. The agency may issue leases competitively, non-competitively or enter into OBAs with qualified interest owners for the development of oil, gas and hydrocarbon resources.

(a) Competitive Bid Offering: when the agency designates leasing units for competitive bidding it shall award leases on the basis of the highest bonus bid per acre made by qualified application.

(i) Minimum Bonus Bid Amount: the minimum acceptable bonus bid for competitive bid offering for leasing units shall be not less than \$1.00 per acre, or fractional acre thereof, which will constitute the (advance) rental for the first year of the lease.

(ii) Notice of Offering: notices of the offering of lands for competitive bid shall:

(A) run for a period of not less than fifteen (15) consecutive days after the notice is posted in the agency's office;

(B) describe the leasing unit;

(C) indicate the resource available for leasing; and

(D) state the last date on which bids may be received.

(iii) Opening of Bid Applications: bid applications shall be opened in the agency's office at 10 a.m. of the first business day following the last day on which bids may be received.

(iv) Content of Applications: each application shall be submitted in a sealed envelope which clearly identifies:

(A) the competitive bid;

(B) leasing unit number; and,

(C) the date of offering for which the bid is submitted.

(v) The application envelope must:

(A) describe only one leasing unit per application; and,

(B) contain one check for the application fee and a separate check for the amount of the bonus bid.

(vi) Withdrawal of Applications: applicants desiring to withdraw an application which has been filed under these competitive bid filing rules must submit a written request to the agency. If the request is received before sealed bids have been opened, all money tendered by the applicant, except the filing fee, shall be refunded. If a request is received after sealed bids have been opened, and if the applicant is awarded the bid, then unless the applicant accepts the offered lease, all money tendered shall be forfeited to the agency.

(vii) Non-Complying Applications: if the agency determines prior to lease issuance that an application did not comply with these rules at the time of bid opening, the application fee shall be retained by the agency and the application returned to the applicant without further consideration by the agency.

(viii) Identical Bids: in the case of identical successful bids, the agency may award the lease by public drawing or oral auction between the identical bidders, held at the agency's offices.

(b) Non-Competitive Leasing By Over-The-Counter Filing.

(i) The director may designate lands for non-competitive leasing by over-the-counter application if the lands have been offered in a competitive offering and have received no bids. Designated lands may be offered for a period of three (3) months from the date of the opening of bids for which no bid was received for said lands under the competitive bid offering.

(ii) The minimum acceptable offer for over-the-counter applications to lease designated lands shall be not less than \$1 per acre, or fractional acre thereof, which will constitute the delay rental for the first year of the lease.

(iii) Applications for over-the-counter leases, when authorized, shall be filed on approved forms received from the office of the agency or as made available on its web site and delivered for filing in the main office of the agency during office hours. Except as provided, all over-the-counter applications received by personal delivery over the counter, are to be immediately stamped with the exact date and time of filing. All applications presented for filing at the

opening of the office for business on any business day are stamped received as of 8 a.m., on that day. All applications received in the first delivery of the U.S. Mail of each business day are stamped received as of 8 a.m. on that day. The time indicated on the time stamp is deemed the time of filing unless the director determines that the application is materially deficient in any particular way. If an application is determined to be deficient, it will be returned to the applicant with a notice of the deficiency.

If an application is returned as deficient and is resubmitted in compliance with the rules within fifteen (15) days from the date of the determination of deficiency, it shall retain its original filing time. If the application is resubmitted at any later time, it is deemed filed at the time of resubmission.

(iv) Where two or more applications for the same lease contain identical bids and bear a time stamp showing the said applications were filed at the same time, the agency may award the lease by public drawing or oral auction between the identical bidders held at the agency's office.

(v) If an application or any part thereof is rejected, any money tendered for rental of the rejected portion shall be refunded or credited to the applicant minus the application fee.

(vi) An applicant who desires to withdraw its application must submit a written request to the agency. If the request is received prior to the time the agency approves the application, all money tendered by the applicant, except the application fee, shall be refunded. If the request is received after approval of the application, then, unless the applicant accepts the offered lease, all money tendered is forfeited to the agency.

(c) Competitive Leasing by Electronic Leasing.

(i) The director may designate leasing units for bidding by electronic means as a vehicle for competitive leasing. Leases will be awarded to the highest bonus bid per acre made by a qualified application. Electronic leasing may be in addition to or in place of the bidding processes set out at R850-21-300(1)(a) or (b) at the discretion of the director. A list of available leasing units and a link to the bidding form will be provided at the agency website.

R850-21-400. Availability of Lands for Lease Issuance.

1. A lease shall not be issued for lands comprising less than a quarter-quarter section or surveyed lot, unless the trust-owned land managed by the agency within any quarter-quarter section or surveyed lot is less than the whole thereof, in which case the lease will be issued only on the entire area owned and available for lease within the quarter-quarter section or surveyed lot.

2. Leases shall be limited to no more than 2560 acres or four sections and must all be located within the same township and range unless a waiver is approved by the director.

3. Any lease may be terminated by the agency in whole or in part upon lessee's failure to comply with any lease term or covenant or applicable laws and rules. Subject to the terms of any lease issued hereunder, any final agency action is appealable pursuant to Section 53C-2-409, in accordance with the provisions of the rules of the agency.

R850-21-500. Lease Provisions.

The following provisions, terms and conditions shall apply to all leases granted by the agency:

1. Delay Rentals and Rental Credits.

(a) The delay rental rate shall not be for less than \$1 per acre, or fractional acre thereof, per year at the time the lease is offered.

(b) The minimum annual delay rental on any lease, regardless of the amount of acreage, shall in no case be less than \$40.

(c) Delay rental payments shall be paid each year on or before the lease anniversary date, unless otherwise stated in the lease.

(d) Any overpayment of delay rental occurring from the lease applicant's incorrect calculation of acreage of lands described in the lease may, at the option of the agency, be credited toward the applicant's rental account.

(e) The agency may accept lease payments made by any party provided, however, that the acceptance of such payment(s) shall not be deemed to be recognition by the agency of any interest of the payee in the lease. Ultimate responsibility for such payments remains with the record title interest owner.

(f) Rental credits, if any, shall be governed by the terms of the lease which provide for such credits.

2. Royalty Provisions: the production royalty rate shall not be less than 12.5% of gross proceeds minus costs of transportation off lease, at the time the lease is offered.

3. Primary Lease Term: no lease shall establish a primary term in excess of ten (10) years.

4. Continuance of a Lease after Expiration of the Primary Term.

(a) A lease shall be continued after the primary term has expired so long as:

(i) the leased substance is being produced in paying quantities from the leased premises or from other lands pooled, communitized or unitized with committed lands; or

(ii) the agency determines that the lessee or designated operator:

(A) is engaged in diligent operations which are determined by the director to be reasonably calculated to advance or restore production of the leased substance from the leased premises or from other lands pooled, communitized, or unitized with committed lands; and

(B) pays the annual minimum royalty set forth in the lease.

(b) Diligent operations may include cessation of operations not to exceed 90 days in duration or a cumulative period of 180 days in one calendar year.

5. Pooling, Communitization or Unitization of Leases.

(a) Lessees, upon prior written authorization of the director, may commit leased trust lands or portions of such lands to unit, cooperative or other plans of development with other lands.

(b) The director may, with the consent of the lessee, modify any term of a lease for lands that are committed to a unit, cooperative, or other plan of development.

(c) Production allocated to leased trust lands under the terms of a unit, cooperative, or other plan of development shall be considered produced from the leased lands whether or not the point of production is located on the leased trust lands.

(d) The term of all leases included in any cooperative or unit plan of oil and gas development or operation in which the agency has joined, or shall hereafter join, shall be extended automatically for the term of the unit or cooperative agreement. Rentals on leases so extended shall be at the rate specified in the lease, subject to change in rates at the discretion of the director or as may be prescribed in the terms of the lease.

(e) Any lease eliminated from any cooperative or unit plan of development or operation, or any lease which is in effect at the termination of a cooperative or unit plan of development or operation, unless relinquished, shall continue in effect for the fixed term of the lease, or for two (2) years after its elimination from the plan or agreement or the termination thereof, whichever is longer, and so long thereafter as the leased substances are produced in paying quantities. Rentals under such leases shall continue at the rate specified in the lease.

6. Shut-in Gas Wells Producing Gas in Paying Quantities: to qualify as a shut-in gas well capable of producing gas in paying quantities:

(a) a minimum royalty shall be paid in an amount not less than the current annual minimum royalty provided for in the lease;

(b) the terms of the lease shall provide the basis upon which the minimum royalty is to be paid by the lessee for a shut-in gas well; and

(c) the director may, at any time, require written justification from the lessee that a well qualifies as a shut-in gas well. A shut-in gas well will not extend a lease more than five years beyond the original primary term of the lease.

7. Oil/Condensate/Gas/NGL Reporting and Records Retention.

(a) Notwithstanding the terms of the lease agreements, gas and NGL report payments are required to be received by the agency on or before the last day of the second month succeeding the month of production.

(b) The extension of payment and reporting time for gas and NGL's does not alter the payment and reporting time for oil and condensate royalty which must be received by the agency on or before the last day of the calendar month succeeding the month of production as currently provided in the lease form.

(c) A lessee, operator, or other person directly involved in developing, producing or disposing of oil or gas under a lease through the point of first sale or point of royalty computation, whichever is later, shall establish and maintain records of such activities and make any reports requested by the director to implement or require compliance with these rules. Upon request by the director or the director's designee, appropriate reports, records or other information shall be made available for inspection and duplication.

(d) Records of production, transportation and sales shall be maintained for six (6) years after the records are generated unless the director notifies the record holder that an audit has been initiated or an investigation begun, involving such records. When so notified, records shall be maintained until the director releases the record holder of the obligation to maintain such records.

8. When the agency approves the amendment of an existing lease by substituting a new lease form for the existing form(s), the amended lease will retain the effective date of the original lease.

9. Other lease provisions.

The agency may require, in addition to the lease provisions required by these rules, any other reasonable provisions to be included in the lease as it deems necessary, but which does not substantially impair the lessees' rights under the lease.

R850-21-600. Transfer by Assignment or Operation of Law.

1. Any lease may be assigned as to all or part of the acreage, to any person, firm, association, or corporation qualified to hold a lease provided, however, that all assignments must be approved by the director. No assignment is effective until approval is given. Any attempted or purported assignment made without approval by the director is void.

2. Transfer by Assignment.

(a) An assignment of either a record title, working or non-working interest in a lease must:

(i) be expressed in a good and sufficient written legal instrument;

(ii) be properly executed, acknowledged and clearly set forth:

- (A) the serial number of the lease;
- (B) the land involved;
- (C) the name and address of the assignee;
- (D) the name of the assignor;
- (E) the interest transferred;

(iii) be accompanied by a certification that the assignee is a qualified interest owner; and

(iv) include a certification of net revenue interest.

(b) Lessees who are assigning a lease shall:

(i) prepare and execute the assignments in duplicate, complete with acknowledgments;

(ii) provide that each copy of the assignment have attached thereto an acceptance of assignment duly executed by the assignee; and

(iii) provide that all assignments forwarded to or deposited with the agency be accompanied by the prescribed fee.

(c) The director shall approve any assignment of interest which has been properly executed; if the required filing fee is paid for each separate lease in which an interest is assigned, and the assignment complies with the law and these rules, so long as the director determines that approval would not be detrimental to the interests of the trust beneficiaries.

(d) If approval of any assignment is withheld by the director, the transferee shall be notified of such decision and its basis. Any decision to withhold approval may be appealed pursuant to Rule R850-8 or any similar rule in place at the time of such decision.

(e) Any assignment of a portion of a lease, whether of a record title, working or non-working interest, covering less than a quarter-quarter section, a surveyed lot, or an assignment of a separate zone or a separate deposit, shall not be approved.

(f) An assignment shall be effective the first day of the month following the approval of the assignment by the director. The assignor or surety, if any, shall continue to be responsible for performance of any and all obligations as if no assignment had been executed until the effective date of the assignment. After the effective date of any assignment, the assignee is bound by the terms of the lease to the same extent as if the assignee were the original lessee, any conditions in the assignment to the contrary notwithstanding; provided, however, that the approved record title interest owner(s) shall retain ultimate responsibility to the agency for all lease obligations.

(g) A record title assignment of an undivided 100% record title interest in less than the total acreage covered by the lease shall cause a segregation of the assigned and retained portions. After the effective date of the approved assignment, the assignor shall be released or discharged from any obligation thereafter accruing to the assigned lands. Segregated leases shall continue in full force and effect for the primary term of the original lease or as further extended pursuant to the terms of the lease. The agency may re-issue a lease with a new lease number covering the assigned lands for the remaining unexpired primary term. The agency may, in lieu of re-issuing a lease, note the assignment in its records with all lands covered by the original lease maintained with the original lease number, and with each separate tract or interest resulting from an assignment with an additional identifying designation to the original number.

(h) Any assignment which would create a cumulative royalty and other non-working interest in excess of twenty per cent (20%) thereby reducing the net revenue interest in the lease to less than eighty per cent (80%) NRI shall not be approved by the agency.

(i) Mass assignments are allowed, provided:

(i) the requirements set forth in paragraph R850-21-600(2) are met;

(ii) the serial number, the lands covered thereby, and the percent of interest assigned therein are expressly described in an attached exhibit;

(iii) the prescribed fee is paid for each lease affected; and

(iv) a separate mass assignment is filed for each type of interest (record title, working or non-working interest) that is assigned.

(j) The agency shall not accept for filing, mortgages, deeds of trust, financing statements or lien filings affecting leases. To the extent a legal foreclosure upon interests in leases occurs under the terms of such agreements, assignments must be prepared as set forth in this section and filed with the agency, which will then be reviewed and approved in due course.

(k) The agency by approving an assignment does not adjudicate the validity of any assignment as it may affect third parties, nor estop the agency from challenging any assignment which is later adjudicated by a court of competent jurisdiction to be invalid or ineffectual.

3. Transfer by Operation of Law.

(a) Death: if an applicant or lessee dies, his/her rights shall be transferred to the heirs, devisees, executor or administrator of the estate, as appropriate, upon the filing of:

(i) a certified copy of the death certificate together with other appropriate documentation to verify change of ownership as required under the probate laws of the state of Utah (Section 75-1-101 et seq.);

(ii) a list containing the serial number of each lease interest affected;

(iii) a statement that the transferee(s) is a qualified interest owner;

(iv) the required filing fee for each separate lease in which an interest is transferred; and

(v) a bond rider or replacement bond for any bond(s) previously furnished by the decedent.

(b) Corporate Merger: if a corporate merger affects any interest in a lease because of the transfer of property of the dissolving corporation to the surviving corporation by operation of law, no assignment of any affected lease is required. A notification of the merger, together with a certified copy of the certificate of merger issued by the Utah Department of Commerce, shall be furnished to the agency, together with a list by serial number of all lease interests affected. The required filing fee must be paid for each separate lease in which an interest is transferred. A bond rider or replacement bond conditioned to cover the obligations of all affected corporations will be required as a prerequisite to recognition of the merger.

(c) Corporate Name Change: if a change of name of a corporate lessee affects any interest in a lease, the notice of name change shall be submitted in writing with a certificate from the Utah Department of Commerce evidencing its recognition of the name change accompanied by a list of lease serial numbers affected by the name change. The required filing fee must be paid for each separate lease in which an interest is transferred. A bond rider or replacement bond, conditioned to cover the obligations of all affected corporations, is required as a prerequisite to recognition of the name change.

R850-21-700. Operations Plan and Reclamation.

1. The lessee or designated operator shall submit to, and must receive the approval of, the agency for a plan of operations prior to any surface disturbance, drilling or other operations which disturb the surface of lands contained in a lease. Said plan shall include, at a minimum, all proposed access and infrastructure locations and proposed site reclamation. Prior to approval, the agency may require the lessee or designated operator to adopt a special rehabilitation program for the particular property in question. Before the lessee or designated operator shall commence actual drilling operations on any well or prior to commencing any surface disturbance associated with the activity on lands contained within a lease, the operator or lessee or designated operator shall provide a plan of operations to the agency simultaneously with the filing of the application for a permit to drill (APD) with UDOGM. The agency will review any request for drilling operations and will grant approval providing that the contemplated location and operations are not in violation of any rules or order of the agency. Agency approval of the APD for oil, gas or hydrocarbon resources administered by the agency is required prior to approval by UDOGM. Notice of approval by the agency shall be given in an expeditious manner to UDOGM.

2. Prior to approval of the APD, the agency shall require the lessee or designated operator to:

(a) provide when requested, a cultural, paleontological and biological survey on lands under an oil, gas and hydrocarbon lease, including providing the agency a copy of any survey(s) required by other governmental agencies;

(b) provide for reasonable mitigation of impacts to other trust resources occasioned by surface or sub-surface operations on the lease;

(c) negotiate with the agency a surface use agreement, right-of-way agreement, or both for trust lands other than the leased lands where the surface of said lands are necessary for the development of the lease; and

(d) keep a log of geologic data accumulated or acquired by the lessee or designated operator about the land described in the lease. This log shall show the formations encountered and any other geologic information reasonably required by lessor and shall be available upon request by the agency. A copy of the log, as well as any data related to exploration drill holes shall be deposited with the agency at the agency's request.

3. Oil and gas drilling, or other operations which disturb the surface of lands contained within or on the leased lands shall require surface rehabilitation of the disturbed area as described in the plan of

operations approved by the agency, and as required by the rules and regulations administered by the UDOGM.

In all cases, the lessee or designated operator shall agree to establish a slope on all excavations to a ratio not steeper than one foot vertically for each two feet of horizontal distance, unless otherwise approved by the agency prior to commencement of operations. This sloping shall be a concurrent part of the operation of the leased premises to the extent that the operation shall not at any time constitute a hazard. All pits, excavations, roads and pads shall be shaped to facilitate drainage and control erosion by following the best management practices. In no case shall the pits or excavations be allowed to become a hazard to persons or livestock. All material removed from the premises shall be stockpiled and be used to fill the pits and for leveling and reclamation of roads and pads, unless consent of the agency to do otherwise is obtained, so at the termination of the lease, the land will as nearly as practicable approximate its original configuration. All drill holes must be plugged in accordance with rules promulgated by UDOGM.

The agency shall require that all topsoil in the affected area be removed, stockpiled, and stabilized on the leased premises until the completion of operations. Upon reclamation, the stockpiled topsoil will be redistributed on the affected area and the land revegetated as prescribed by the agency. All mud pits shall be filled and materials and debris removed from the site.

4. All lessees or designated operators under oil, gas and hydrocarbon leases shall be responsible for compliance with all laws and notification requirements and operating rules promulgated by UDOGM with regard to oil, gas and hydrocarbon exploration, or drilling on lands within the state of Utah under The Oil and Gas Conservation Act (Section 40-6-1 et seq.). Lessees or designated operators shall fully comply with all the rules or requirements of agencies having jurisdiction and provide timely notifications of operations plans, well completion reports, or other information as may be requested or required by the agency.

R850-21-800. Bonding.

1. Bond Obligations.

(a) Prior to commencement of any operations which will disturb the surface of the land covered by a lease, the lessee or designated operator shall post with UDOGM a bond in a form and in the amount set forth in R649-3-1 et seq. and approved by UDOGM to assure compliance with those terms and conditions of the lease and these rules, involving costs of reclamation, damages to the surface and improvements on the surface and all other related requirements and standards set forth in the lease, rules, procedures and policies of the agency and UDOGM.

(b) A separate bond shall be posted with the agency by the lessee or the designated operator to assure compliance with all remaining terms and conditions of the lease not covered by the bond to be filed with UDOGM, including, but not limited to payment of royalties.

(c) These bonds shall be in effect even if the lessee or designated operator has conveyed all or part of the leasehold interest to an assignee(s) or subsequent operator(s), until the bonds are released by UDOGM and the agency either because the lessee or designated operator has fully satisfied bonding obligations set forth in this section or the bond is replaced with a new bond posted by an assignee or designated operator.

(d) Bonds held by the agency shall be in the form and subject to the requirements set forth herein:

(i) Surety Bonds.

Surety bonds shall be issued by a qualified surety company, approved by the agency and registered in the state of Utah;

(ii) Personal Bonds.

Personal bonds shall be accompanied by:

(A) a cash deposit to the School and Institutional Trust Lands Administration. The agency will not be responsible for any investment returns on cash deposits. Such interest will be retained in

the account and applied to the bond value of the account unless the agency has approved the payment of interest to the operator; or

(B) a cashier's check or certified check made payable to the School and Institutional Trust Lands Administration; or

(C) negotiable bonds of the United States, a state, or a municipality. The negotiable bond shall be endorsed only to the order of, and placed in the possession of, the agency. The agency shall value the negotiable bond at its current market value, not at the face value; or

(D) negotiable certificates of deposit. The certificates shall be issued by a federally insured bank authorized to do business in Utah. The certificates shall be made payable or assigned only to the agency both in writing and upon the records of the bank issuing the certificate. The certificates shall be placed in the possession of the agency or held by a federally insured bank authorized to do business in Utah. If assigned, the agency shall require the banks issuing the certificates to waive all rights of setoff or liens against those certificates; or

(E) an irrevocable letter of credit: Letters of credit shall be issued by a federally insured bank authorized to do business in Utah and will be irrevocable during their terms. Letters of credit shall be placed in the possession of and payable upon demand only to the agency. Letters of credit shall be automatically renewable or the operator shall ensure continuous bond coverage by replacing letters of credit, if necessary, at least thirty (30) days before their expiration date with other acceptable bond types or letters of credit; or

(F) any other type of surety approved by the agency.

2. Bond Amounts.

The bond amount required for an oil, gas and hydrocarbon exploration project to be held by the agency for those lease obligations not covered by the bond held by UDOGM shall be:

(a) a statewide blanket bond in the minimum amount of \$15,000 covering exploration and production operations on all agency leases held by lessee; or

(b) a project bond covering an individual, single-well exploration project involving one or more leases. The amount of the project bond will be determined by the agency at the time lessee gives notice of proposed operations. This bond shall not be less than \$5,000 unless waived in writing by the director.

3. Bond Default.

(a) Where, upon default, the surety makes a payment to the agency of an obligation incurred under the terms of a lease, the face of the bond and surety's liability shall be reduced by the amount of such payment.

(b) After default, where the obligation in default equals or is less than the face amount of the bond(s), the lessee or designated operator shall either post a new bond, restore the existing bond to the amount previously held, or post an adjusted amount as determined by the agency. Alternatively, the lessee or designated operator shall make full payment to the agency for all obligations incurred that are in excess of the face amount of the bond and shall post a new bond in the amount previously held or such other amount as determined by the agency. Operations shall be discontinued until the restoration of a bond or posting of a new bond occurs. Failure to comply with these requirements may subject all leases covered by such bond(s) to be cancelled by the agency.

(c) The agency will not give consent to termination of the period of liability of any bond unless an acceptable replacement bond has been filed or until all terms and conditions of the lease have been met.

(d) Any lessee or designated operator forfeiting a bond is denied approval of any future oil, gas or hydrocarbon exploration on agency lands except by compensating the agency for previous defaults and posting the full bond amount for reclamation or lease performance on subsequent operations as determined by the agency.

4. Bonds may be increased at any time in reasonable amounts as the agency may order, providing the agency first gives lessee thirty (30) days written notice stating the increase and the reason for the increase.

5. The agency may waive the filing of a bond for any period during which a bond meeting the requirements of this section is on file with another agency.

R850-21-1000. Multiple Mineral Development (MMD) Area Designation.

1. The agency may designate any land under its authority as a multiple mineral development area. In designated multiple mineral development areas the agency may require, in addition to all other terms and conditions of the lease, that the lessee furnish a bond or evidence of financial responsibility as specified by the agency, to assure that the agency and other lessees shall be indemnified and held harmless from and against unreasonable and all unnecessary damage to mineral deposits or improvements caused by the conduct of the lessee on trust lands. Written notice shall be given to all oil, gas and hydrocarbon and other mineral lessees holding a lease for any mineral commodity within the multiple mineral development area. Thereafter, in order to preserve the value of mineral resources the agency may impose any reasonable requirements upon any oil, gas and hydrocarbon or other mineral lessee who intends to conduct any mineral activity within the multiple mineral development area. The lessee is required to submit advance written notice of any activities to occur within the multiple mineral development area to the agency and any other information that the agency may request. All activities within the multiple mineral development area are to be deferred until the agency has specified the terms and conditions under which the mineral activity is to occur and has granted specific permission to conduct the activity. The agency may hold public meetings regarding mineral development within the multiple mineral development area.

2. The agency may grant a lease extension under a multiple mineral development area designation, providing that the lessee or designated operator requests an extension to the agency prior to the lease expiration date, and that the lessee or designated operator would have otherwise been able to request a lease extension as provided in Subsection 53C-2-405(4).

KEY: oil gas and hydrocarbons, administrative procedures, lease provisions, operations

July 23, 2012

53C-1-302(1)(a)(ii)

Notice of Continuation April 1, 2015

53C-2 et seq.

Resources.**R850-22-100. Authorities.**

This rule implements Sections 6, 8, 10, and 12 of the Utah Enabling Act, Articles X and XX of the Utah Constitution, and Utah Code Title 53C et seq. which authorize the Director of the School and Institutional Trust Lands Administration to establish rules for the management of bituminous-asphaltic sands and oil shale resources and for the issuance of leases for such resources on trust lands.

R850-22-150. Planning.

Pursuant to Subsection 53C-2-201(1)(a), this category of activity carries no planning obligations by the agency beyond existing rule-based analysis and approval processes. Bituminous-asphaltic sands and oil shale development activities are regulated pursuant to R649.

R850-22-175. Definitions.

The following words and terms, when used in Section R850-22 shall have the following meanings, unless otherwise indicated:

1. Act: Utah Code 53C-1 et seq.
2. Agency: School and Institutional Trust Lands Administration or its predecessor agency.
3. Anniversary Date: the same day and month in succeeding years as the effective date of the lease or permit.
4. Beneficiaries: the public school system and other institutions for whom the State of Utah was granted lands in trust by the United States under the Utah Enabling Act.
5. Bonus Bid: a payment reflecting an amount to be paid by an applicant in addition to the rentals and royalties set forth in a lease application as consideration for the issuance of such lease.
6. Assignment(s): a conveyance of all or a portion of the lessee's record title interest or royalty interest in a lease.
 - (a) Certification of Net Revenue Interest: the certification by oath of an assignor to the agency that the total net working revenue interest (NRI) in the lease which the assignment affects has not been reduced to less than 80 per cent of 100 per cent NRI. Certification shall only be required for leases issued after April 1, 2005.
 - (b) Mass Assignment: an assignment that affects more than one lease, including assignments which affect record title, working or non-working interests.
 - (c) Non-Working Interest Assignment: an assignment of interest in production from a lease other than the agency's royalty, the record title, or the working interest including but not limited to overriding royalties, production payments, net profits interests, and carried interests assignments but excluding liens and security interests.
 - (d) Record Title Assignment: an assignment of the lessee's interest in a lease which includes the obligation to pay rent, the rights to assign or relinquish the lease, and the ultimate responsibility to the agency for obligations under the lease.
 - (e) Working Interest Assignment: a transfer of a non-record title interest in a lease, including but not limited to wellbore assignments, but excepting overriding royalty, oil payment, net-profit, or carried interests or other non-working interests.
7. Board of Trustees: the School and Institutional Trust Lands Board of Trustees created under Section 53C-1-202.
8. Committed Lands: a consolidation of all or a portion of lands subject to a lease approved by the director for unitization which forms a logical unit for exploration, development or drilling operations.
9. Designated Operator: the person or entity that has been granted authority by the record title interest owner(s) in a lease and has been approved by the agency to conduct operations on the lease or a portion thereof.
10. Director: the person designated within the agency who manages the agency in fulfillment of its purposes as set forth in the Act.
11. Effective Date: unless otherwise defined in the lease, the effective date shall be the first day of the month following the date a lease is executed by the agency. An amended, extended or segregated lease will retain the effective date of the original lease.

12. Lease: a bituminous-asphaltic sands or oil shale lease covering the commodities defined in R850-22-200 issued by the agency.

13. Lease Year: the twelve-month period commencing at 12:01 a.m. on the month and day of the effective date of the lease and ending on the last day of the twelfth month at 12 midnight.

14. Leasing Unit: a parcel of trust land lying within one or more sections that is offered for lease as an indivisible unit through a competitive lease application process which would constitute one lease when issued.

15. Lessee: a person or entity holding a record title interest in a lease.

16. Other Business Arrangement ("OBA"): an agreement entered into between the agency and a person or entity consistent with the purposes of the Act and approved by the Board of Trustees. By way of example, but not of limitation, OBAs may be for farmout agreements or joint venture agreements. An agreement for an OBA may be initiated by the agency or by a proponent of an agreement by filing a proposal for an OBA with the agency.

17. Over-the-Counter Lease: the issuance of a lease through application on a first come, first served basis.

18. Production in Paying Quantities (also referred to in older mineral leases as Production in Commercial Quantities): production of the leased substance in quantities sufficient to yield revenue in excess of operating costs.

19. Rental: the amount due and payable on or before the anniversary date of a lease to maintain the lease in full force and effect for the following lease year.

20. Record Title: the legal ownership of a mineral lease as established in the records of the agency.

21. Sub-lease: a transfer of a non-record title interest in a mineral lease.

22. Surveyed Lot: an irregular part of a section identified by cadastral survey and maintained in the official records of the agency.

23. Trust Lands: those lands and mineral resources granted by the United States in the Utah Enabling Act to the State of Utah in trust, and other lands and mineral resources acquired by the trust, which must be managed for the benefit of the state's public education system or the institutions designated as beneficiaries.

24. UDOGM: the Division of Oil, Gas and Mining of the Utah State Department of Natural Resources.

25. Except as specifically defined above, the definitions set forth at R850-1-200 shall also be applicable.

R850-22-200. Classification of Bituminous-Asphaltic Sands and Oil Shale.

1. The term "bituminous-asphaltic sands" means rock or sand impregnated with asphalt or heavy oil and is synonymous with the term "tar sands." This category does not cover any substances, either combustible or non-combustible, which are produced in a gaseous or rarefied state at ordinary temperature and pressure conditions other than gas which results from artificial introduction of heat. Nor does this category embrace any liquid hydrocarbon substance which occurs naturally in a liquid form in the earth regardless of depth, including drip gasoline or other natural condensate recovered from gas. The bituminous-asphaltic sands category does not include coal, oil shale, or gilsonite.

2. The oil shale category shall include any sedimentary rock containing kerogen.

R850-22-300. Lease Application Process.

1. The agency may issue leases competitively, non-competitively or enter into OBAs with qualified interest owners for the development of bituminous-asphaltic sands and oil shale resources.

(a) Competitive Bid Offering: when the agency designates leasing units for competitive bidding it shall award leases on the basis of the highest bonus bid per acre made by qualified application.

(i) Minimum Bonus Bid Amount: the minimum acceptable bonus bid for competitive bid offering for leasing units shall be not less than \$1.00 per acre, or fractional acre thereof, which will constitute the (advance) rental for the first year of the lease.

(ii) Notice of Offering: notices of the offering of lands for competitive bid shall:

(A) run for a period of not less than fifteen (15) consecutive days after the notice is posted in the agency's office;

(B) describe the leasing unit;

(C) indicate the resource available for leasing; and

(D) state the last date on which bids may be received.

(iii) Opening of Bid Applications: bid applications shall be opened in the agency's office at 10 a.m. of the first business day following the last day on which bids may be received.

(iv) Content of Applications: each application shall be submitted in a sealed envelope which clearly identifies:

(A) the competitive bid;

(B) leasing unit number; and,

(C) the date of offering for which the bid is submitted.

(v) The application envelope must:

(A) describe only one leasing unit per application; and,

(B) contain one check for the application fee and a separate check for the amount of the bonus bid.

(vi) Withdrawal of Applications: applicants desiring to withdraw an application which has been filed under these competitive bid filing rules must submit a written request to the agency. If the request is received before sealed bids have been opened, all money tendered by the applicant, except the filing fee, shall be refunded. If a request is received after sealed bids have been opened, and if the applicant is awarded the bid, then unless the applicant accepts the offered lease, all money tendered shall be forfeited to the agency.

(vii) Non-Complying Applications: if the agency determines prior to lease issuance that an application did not comply with these rules at the time of bid opening, the application fee shall be retained by the agency and the application returned to the applicant without further consideration by the agency.

(viii) Identical Bids: in the case of identical successful bids, the agency may award the lease by public drawing or oral auction between the identical bidders, held at the agency's offices.

(b) Non-Competitive Leasing By Over-The-Counter Filing.

(i) The director may designate lands for non-competitive leasing by over-the-counter application if the lands have been offered in a competitive offering and have received no bids.

(ii) The minimum acceptable offer for over-the-counter applications to lease designated lands shall be not less than \$1 per acre, or fractional acre thereof.

(iii) Applications for over-the-counter leases, when authorized, shall be filed on approved forms received from the office of the agency or as made available on its web site and delivered for filing in the main office of the agency during office hours. Except as provided, all over-the-counter applications received by personal delivery over the counter, are to be immediately stamped with the date and time of filing. All applications presented for filing at the opening of the office for business on any business day are stamped received as of 8 a.m., on that day. All applications received in the first delivery of the U.S. Mail of each business day are stamped received as of 8 a.m. on that day. The time indicated on the time stamp is deemed the time of filing unless the director determines that the application is materially deficient in any particular way. If an application is determined to be deficient, it will be returned to the applicant with a notice of the deficiency.

If an application is returned as deficient and is resubmitted in compliance with the rules within fifteen (15) days from the date of the determination of deficiency, it shall retain its original filing time.

If the application is resubmitted at any later time, it is deemed filed at the time of resubmission.

(iv) Where two or more applications for the same lease contain identical bids and bear a time stamp showing the said applications were filed at the same time, the agency may award the

lease by public drawing or oral auction between the identical bidders, held at the agency's office.

(v) If an application or any part thereof is rejected, any money tendered for rental of the rejected portion shall be refunded or credited to applicant, minus the application fee.

(vi) An applicant who desires to withdraw its application must submit a written request to the agency. If the request is received prior to the time the agency approves the application, all money tendered by the applicant, except the application fee, shall be refunded. If the request is received after approval of the application, then, unless the applicant accepts the offered lease, all money tendered is forfeited to the agency.

R850-22-400. Availability of Lands for Lease Issuance.

1. A lease shall not be issued for lands comprising less than a quarter-quarter section or surveyed lot, unless the trust land managed by the agency within any quarter-quarter section or surveyed lot is less than the whole thereof, in which case the lease will be issued only on the entire area owned and available for lease within the quarter-quarter section or surveyed lot.

2. Leases shall be limited to no more than 2560 acres or four sections and must all be located within the same township and range unless a waiver is approved by the director.

3. Any lease may be terminated by the agency in whole or in part upon lessee's failure to comply with any lease term or covenant or applicable laws and rules. Subject to the terms of any lease issued hereunder, any final agency action is appealable pursuant to Section 53C-2-409, in accordance with the provisions of the rules of the agency.

R850-22-500. Bituminous-Asphaltic Sands and Oil Shale Lease Provisions.

The following provisions, terms and conditions shall apply to all leases granted by the agency:

1. Rentals and Rental Credits.

(a) The rental rate shall not be for less than \$1 per acre, or fractional acre thereof, per year at the time the lease is offered.

(b) The minimum annual rental on any lease, regardless of the amount of acreage, shall in no case be less than \$500.

(c) Rental payments shall be paid in advance each year on or before the lease anniversary date, unless otherwise stated in the lease.

(d) Any overpayment of rental occurring from the lease applicant's incorrect calculation of acreage of lands described in the lease may, at the option of the agency, be credited toward the applicant's rental account.

(e) The agency may accept lease payments made by any party provided, however, that the acceptance of such payment(s) shall not be deemed to be recognition by the agency of any interest of the payee in the lease. Ultimate responsibility for such payments remains with the record title interest owner.

(f) Rental credits, if any, shall be governed by the terms of the lease which provide for such credits.

2. Royalty Provisions: during the primary term of the lease, the lessee shall pay lessor a production royalty on the basis of eight percent (8%) of the gross value, including all bonuses and allowances received by lessee, of each marketable product produced from the leased substance and sold under a bonafide contract of sale. The royalty may, at the discretion of the lessor, be increased after the ten (10) year primary term at a rate not in excess of one percent (1%) per annum to a maximum of twelve and one-half percent (12.5%).

3. Primary Lease Term: no lease shall establish a primary term in excess of ten (10) years.

4. Continuance of a Lease after Expiration of a Primary Term.

(a) A lease shall be continued after the primary term has expired so long as:

(i) the leased substance is being produced in paying quantities from the leased premises or from other lands communitized or unitized with committed lands; or

(ii) the agency determines that the lessee or designated operator:

(A) is engaged in diligent operations which are determined by the director to be reasonably calculated to advance or restore production of the leased substance from the leased premises or from other lands communitized, or unitized with committed lands; and

(B) pays the annual minimum royalty set forth in the lease.

5. Communitization or Unitization of Leases.

(a) Lessees, upon prior written authorization of the director, may commit leased trust lands or portions of such lands to unit, cooperative or other plans of development with other lands.

(b) The director may, with the consent of the lessee, modify any term of a lease for lands that are committed to a unit, cooperative, or other plan of development.

(c) Production allocated to leased trust lands under the terms of a unit, cooperative, or other plan of development shall be considered produced from the leased lands whether or not the point of production is located on the leased trust lands.

(d) The term of all leases included in any cooperative or unit plan of development or operation in which the agency has joined, or shall hereafter join, shall be extended automatically for the term of the unit or cooperative agreement. Rentals on leases so extended shall be at the rate specified in the lease, subject to change in rates at the discretion of the director or as may be prescribed in the terms of the lease.

(e) Any lease eliminated from any cooperative or unit plan of development or operation, or any lease which is in effect at the termination of a cooperative or unit plan of development or operation, unless relinquished, shall continue in effect for the fixed term of the lease, or for two (2) years after its elimination from the plan or agreement or the termination thereof, whichever is longer, and so long thereafter as the leased substances are produced in paying quantities. Rentals under such leases shall continue at the rate specified in the lease.

6. When the agency approves the amendment of an existing lease by substituting a new lease form for the existing form(s), the amended lease will retain the effective date of the original lease.

7. Other Lease Provisions.

The agency may require, in addition to the lease provisions required by these rules, any other reasonable provisions to be included in the lease as it deems necessary, but which does not substantially impair the lessees' rights under the lease.

R850-22-600. Transfer by Assignment or Operation of Law.

1. Any lease may be assigned as to all or part of the acreage, to any person, firm, association, or corporation qualified to hold a lease provided, however, that all assignments must be approved by the director. No assignment is effective until approval is given. Any attempted or purported assignment made without approval by the director is void.

2. Transfer by Assignment.

(a) An assignment of either a record title, working or non-working interest in a lease must:

(i) be expressed in a good and sufficient written legal instrument;

(ii) be properly executed, acknowledged and clearly set forth:

(A) the serial number of the lease;

(B) the land involved;

(C) the name and address of the assignee;

(D) the name of the assignor;

(E) the interest transferred;

(iii) be accompanied by a certification that the assignee is a qualified interest owner; and

(iv) include a certification of net revenue interest.

(b) Lessees who are assigning a lease shall:

(i) prepare and execute the assignments in duplicate, complete with acknowledgments;

(ii) provide that each copy of the assignment have attached thereto an acceptance of assignment duly executed by the assignee; and

(iii) provide that all assignments forwarded to or deposited with the agency be accompanied by the prescribed fee.

(c) The director shall approve any assignment of interest which has been properly executed; if the required filing fee is paid for each separate lease in which an interest is assigned, and the assignment complies with the law and these rules, so long as the director determines that approval would not be detrimental to the interests of the trust beneficiaries.

(d) If approval of any assignment is withheld by the director, the transferee shall be notified of such decision and its basis. Any decision to withhold approval may be appealed pursuant to Rule R850-8 or any similar rule in place at the time of such decision.

(e) Any assignment of a portion of a lease, whether of a record title, working or non-working interest, covering less than a quarter-quarter section, a surveyed lot, or an assignment of a separate zone or a separate deposit, shall not be approved.

(f) An assignment shall be effective the first day of the month following the approval of the assignment by the director. The assignor or surety, if any, shall continue to be responsible for performance of any and all obligations as if no assignment had been executed until the effective date of the assignment. After the effective date of any assignment, the assignee is bound by the terms of the lease to the same extent as if the assignee were the original lessee, any conditions in the assignment to the contrary notwithstanding; provided, however, that the approved record title interest owner(s) shall retain ultimate responsibility to the agency for all lease obligations.

(g) A record title assignment of an undivided 100% record title interest in less than the total acreage covered by the lease shall cause a segregation of the assigned and retained portions. After the effective date of the approved assignment, the assignor shall be released or discharged from any obligation thereafter accruing to the assigned lands. Segregated leases shall continue in full force and effect for the primary term of the original lease or as further extended pursuant to the terms of the lease. The agency may re-issue a lease with a new lease number covering the assigned lands for the remaining unexpired primary term. The agency may, in lieu of re-issuing a lease, note the assignment in its records with all lands covered by the original lease maintained with the original lease number, and with each separate tract or interest resulting from an assignment with an additional identifying designation to the original number.

(h) Any assignment which would create a cumulative royalty and other non-working interest in excess of twenty per cent (20%) thereby reducing the net revenue interest in the lease to less than eighty per cent (80%) NRI shall not be approved by the agency.

(i) Mass assignments are allowed, provided:

(i) the requirements set forth in paragraph R850-22-600(2) are met;

(ii) the serial number, the lands covered thereby, and the percent of interest assigned therein are expressly described in an attached exhibit;

(iii) the prescribed fee is paid for each lease affected; and

(iv) a separate mass assignment is filed for each type of interest (record title, working or non-working interest) that is assigned.

(j) The agency shall not accept for filing, mortgages, deeds of trust, financing statements or lien filings affecting leases. To the extent a legal foreclosure upon interests in leases occurs under the terms of such agreements, assignments must be prepared as set forth in this section and filed with the agency, which will then be reviewed and approved in due course.

(k) The agency by approving an assignment does not adjudicate the validity of any assignment as it may affect third parties, nor estop the agency from challenging any assignment which is later adjudicated by a court of competent jurisdiction to be invalid or ineffectual.

3. Transfer by Operation of Law.

(a) Death: if an applicant or lessee dies, his/her rights shall be transferred to the heirs, devisees, executor or administrator of the estate, as appropriate, upon the filing of:

(i) a certified copy of the death certificate together with other appropriate documentation to verify change of ownership as required under the probate laws of the state of Utah (Section 75-1-101 et seq.);

(ii) a list containing the serial number of each lease interest affected;

(iii) a statement that the transferee(s) is a qualified interest owner;

(iv) the required filing fee for each separate lease in which an interest is transferred; and

(v) a bond rider or replacement bond for any bond(s) previously furnished by the decedent.

(b) Corporate Merger: if a corporate merger affects any interest in a lease because of the transfer of property of the dissolving corporation to the surviving corporation by operation of law, no assignment of any affected lease is required. A notification of the merger, together with a certified copy of the certificate of merger issued by the Utah Department of Commerce, shall be furnished to the agency, together with a list by serial number of all lease interests affected. The required filing fee must be paid for each separate lease in which an interest is transferred. A bond rider or replacement bond conditioned to cover the obligations of all affected corporations will be required as a prerequisite to recognition of the merger.

(c) Corporate Name Change: if a change of name of a corporate lessee affects any interest in a lease, the notice of name change shall be submitted in writing with a certificate from the Utah Department of Commerce evidencing its recognition of the name change accompanied by a list of lease serial numbers affected by the name change. The required filing fee must be paid for each separate lease in which an interest is transferred. A bond rider or replacement bond, conditioned to cover the obligations of all affected corporations, is required as a prerequisite to recognition of the name change.

R850-22-700. Operations Plan and Reclamation.

1. All lessees, permittees or designated operators shall submit to the agency, and receive approval for, a plan of operations prior to any surface disturbance, drilling or other operations which disturb the surface of trust lands subject to a lease or permit. The operations plan shall include at a minimum proposed access and infrastructure locations and proposed site reclamation. Prior to approval, the agency may require the lessee, permittee or designated operator to adopt a special rehabilitation program for the particular property in question. Before the lessee, permittee or designated operator shall commence actual operations or prior to commencing any surface disturbance associated with the activity on lands subject to a lease or permit, the permittee, lessee or designated operator shall provide a plan of operations to the agency simultaneously with the filing of any required plan of operations or permit application with UDOGM. The agency will review any request for approval of operations and will grant approval providing that the proposed location and operations are not in violation of any rules or order of the agency. Before operations can commence, approval must be granted by the UDOGM, if required by statute, and by the agency. Notice of approval by the agency shall be given in an expeditious manner to UDOGM.

2. Prior to approval of any surface disturbing operation, the agency may require the lessee, permittee or designated operator to:

(a) provide when requested, a cultural, paleontological and biological survey on lands under lease or permit, including providing the agency a copy of any survey(s) required by other governmental agencies;

(b) provide for reasonable mitigation of impacts to other trust resources occasioned by surface or sub-surface operations on the lease;

(c) negotiate with the agency a surface use agreement, right-of-way agreement, or both for trust lands other than the leased or

permitted lands, where the surface of said lands are necessary for the development of the lease or permit.

3. Maintain a record of geologic data accumulated or acquired by the lessee, permittee or designated operator concerning the land described in the lease or permit. This record shall show the formations encountered and any other geologic or development information reasonably required by the agency and shall be available upon request by the agency. A copy of the record, as well as any other data related to geologic exploration or resource development on trust lands shall be deposited with the agency at the agency's request.

4. All operation which disturbs the surface of lands contained within or on trust lands shall be required to be reclaimed by rehabilitation of the disturbed area as described in the plan of operations approved by the agency, and as required by the laws administered by the UDOGM or as required by any other state or federal agency.

(a) In all cases, at a minimum, the lessee, permittee or designated operator shall agree to establish a slope on all excavations to a ratio not steeper than one foot vertically for each two feet of horizontal distance, unless otherwise approved by the agency and UDOGM prior to commencement of operations. The establishment of a stable slope shall be a concurrent part of the operation of the leased or permitted premises such that operations shall at no time constitute a hazard. All pits, excavations, roads and pads shall be shaped to facilitate drainage and control erosion by following the best management practices.

(b) In no case shall the pits or excavations be allowed to become a hazard to persons or livestock. All material removed from trust lands shall be stockpiled and be used to fill the pits and for leveling and reclamation of roads and pads unless consent of the agency, and if applicable of UDOGM, to do otherwise is obtained, so at the termination of the lease, the land will as nearly as practicable approximate its original horizontal and vertical configuration. All drill holes must be plugged in accordance with rules promulgated by UDOGM.

(c) The agency shall require of the lessee, permittee or designated operator that all topsoil in the area of surface disturbance be removed, stockpiled, and stabilized on the trust lands until the completion of operations and satisfactory use in reclamation. At the time of reclamation, the stockpiled topsoil shall be redistributed on the area of surface disturbance and the land revegetated as prescribed by the UDOGM and the agency. All mud pits and temporary debris and settlement basins shall be filled and materials and debris removed from the site.

5. All lessees, permittees or designated operators shall be responsible for compliance with all laws and notification requirements and operating rules promulgated by UDOGM or any other federal or state agency that may have regulatory jurisdiction over mineral development on trust lands or the leased or permitted substance.

R850-22-800. Bonding.

1. Bond Obligations.

(a) Prior to commencement of any operations which will disturb the surface of the land covered by a lease, the lessee or designated operator shall post with UDOGM, a bond in a form and in the amount set forth in R647-3-1 et seq. and approved by UDOGM to assure compliance with those terms and conditions of the lease and these rules, involving costs of reclamation, damages to the surface and improvements on the surface and all other related requirements and standards set forth in the lease, rules, procedures and policies of the agency and UDOGM.

(b) A separate bond shall be posted with the agency by the lessee or the designated operator to assure compliance with all remaining terms and conditions of the lease not covered by the bond to be filed with UDOGM, including, but not limited to payment of royalties.

(c) These bonds shall be in effect even if the lessee or designated operator has conveyed all or part of the leasehold interest to an assignee(s) or subsequent operator(s), until the bonds are released

by UDOGM and the agency either because the lessee or designated operator has fully satisfied bonding obligations set forth in this section or the bond is replaced with a new bond posted by an assignee or designated operator.

(d) Bonds held by the agency shall be in the form and subject to the requirements set forth herein:

(i) Surety Bonds.

Surety bonds shall be issued by a qualified surety company, approved by the agency and registered in the state of Utah.

(ii) Personal Bonds.

Personal bonds shall be accompanied by:

(A) a cash deposit to the School and Institutional Trust Lands Administration. The agency will not be responsible for any investment returns on cash deposits. Such interest will be retained in the account and applied to the bond value of the account unless the agency has approved the payment of interest to the operator; or

(B) a cashier's check or certified check made payable to the School and Institutional Trust Lands Administration; or

(C) negotiable bonds of the United States, a state, or a municipality. The negotiable bond shall be endorsed only to the order of, and placed in the possession of, the agency. The agency shall value the negotiable bond at its current market value, not at the face value; or

(D) negotiable certificates of deposit. The certificates shall be issued by a federally insured bank authorized to do business in Utah. The certificates shall be made payable or assigned only to the agency both in writing and upon the records of the bank issuing the certificate. The certificates shall be placed in the possession of the agency or held by a federally insured bank authorized to do business in Utah. If assigned, the agency shall require the banks issuing the certificates to waive all rights of setoff or liens against those certificates; or

(E) an irrevocable letter of credit. Letters of credit shall be issued by a federally insured bank authorized to do business in Utah and will be irrevocable during their terms. Letters of credit shall be placed in the possession of and payable upon demand only to the agency. Letters of credit shall be automatically renewable or the operator shall ensure continuous bond coverage by replacing letters of credit, if necessary, at least thirty (30) days before their expiration date with other acceptable bond types or letters of credit; or

(F) any other type of surety approved by the agency.

2. Bond Amounts.

The bond amount required for an exploration or development project to be held by the agency for those lease obligations not covered by the bond held by UDOGM shall be:

(a) a project bond covering an individual, single-exploration project involving one or more leases. The amount of the project bond will be determined by the agency at the time lessee gives notice of proposed operations.

3. Bond Default.

(a) Where, upon default, the surety makes a payment to the agency of an obligation incurred under the terms of a lease, the face of the bond and surety's liability shall be reduced by the amount of such payment.

(b) After default, where the obligation in default equals or is less than the face amount of the bond(s), the lessee or designated operator shall either post a new bond, restore the existing bond to the amount previously held, or post an adjusted amount as determined by UDOGM or the agency. Alternatively, the lessee or designated operator shall make full payment to the agency for all obligations incurred that are in excess of the face amount of the bond and shall post a new bond in the amount previously held or such other amount as determined by the agency. Operations shall be discontinued until the restoration of a bond or posting of a new bond occurs. Failure to comply with these requirements may subject all leases covered by such bond(s) to be cancelled by the agency.

(c) The agency will not give consent to termination of the period of liability of any bond unless an acceptable replacement bond has been filed with UDOGM or the agency, or until all terms and conditions of the lease and all reclamation obligations of UDOGM have been met.

(d) Any lessee or designated operator forfeiting a bond is denied approval of any future oil, gas or hydrocarbon exploration on agency lands except by compensating the agency for previous defaults and posting the full bond amount for reclamation or lease performance on subsequent operations as determined by the agency.

4. Bonds may be increased at any time in reasonable amounts as the agency may order, providing the agency first gives lessee thirty (30) days written notice stating the increase and the reason for the increase.

5. The agency may waive the filing of a bond for any period during which a bond meeting the requirements of this section is on file with another agency.

R850-22-1000. Multiple Mineral Development (MMD) Area Designation.

1. The agency may designate any land under its authority as a multiple mineral development area. In designated multiple mineral development areas the agency may require, in addition to all other terms and conditions of the lease, that the lessee furnish a bond or evidence of financial responsibility as specified by the agency, to assure that the agency and other lessees shall be indemnified and held harmless from and against unreasonable and all unnecessary damage to mineral deposits or improvements caused by the conduct of the lessee on trust lands. Written notice shall be given to all lessees holding a lease for any mineral commodity within the multiple mineral development area. Thereafter, in order to preserve the value of mineral resources the agency may impose any reasonable requirements upon any mineral lessee who intends to conduct any mineral activity within the multiple mineral development area. The lessee is required to submit advance written notice of any activities to occur within the multiple mineral development area to the agency and any other information that the agency may request. All activities within the multiple mineral development area are to be deferred until the agency has specified the terms and conditions under which the mineral activity is to occur and has granted specific permission to conduct the activity. The agency may hold public meetings regarding the mineral development within the multiple mineral development area.

2. The agency may grant a lease extension under a multiple mineral development area designation, providing that the lessee or designated operator requests an extension to the agency prior to the lease expiration date, and that the lessee or designated operator would have otherwise been able to request a lease extension as provided in Subsection 53C-2-405(4).

KEY: bituminous-asphaltic sands, oil shale, administrative procedures, lease provisions

March 20, 2006

Notice of Continuation April 1, 2015

53C-1-302(1)(a)(ii)

53C-2 et seq.

**R850. School and Institutional Trust Lands, Administration.
R850-23. Sand, Gravel and Cinders Permits.****R850-23-100. Authorities.**

This rule implements Sections 6, 8, 10, and 12 of the Utah Enabling Act, Articles X and XX of the Utah Constitution, Subsections 53C-1-302(1)(a)(ii) and 53C-4-101(1) which authorize the Director of the School and Institutional Trust Lands Administration to prescribe agency objectives, standards and conditions for the issuance of sand, gravel and cinders permits and for conveyances for common varieties of sand, gravel, cinders, and similar materials on trust lands.

R850-23-125. Mineral Estate Distinctions.

Common varieties of sand and gravel and volcanic cinder are not considered part of the mineral estate on trust lands in Utah. These commodities may only be obtained through a materials permit approved by the director and in accordance with these rules.

R850-23-150. Planning.

Pursuant to Subsection 53C-2-201(1)(a), the agency shall also undertake to complete the following planning obligations, in addition to the rule-based analysis and approval processes that are prescribed by this rule:

1. to the extent required by the Memorandum of Understanding between the State Planning Coordinator and the School and Institutional Trust Lands Administration, submit the proposal for review by the Resource Development Coordinating Committee (RDCC) if the proposed action may have a significant impact upon natural or cultural resources of the state;
2. evaluation of and response to comments received through the RDCC process; and
3. evaluation of and response to any comments received through the solicitation process conducted pursuant to R850-23-500(2).

R850-23-175. Definitions.

1. Permit: a sand, gravel or cinders permit.
2. Permittee: a person or entity holding a record title interest in a sand, gravel or cinders permit.

R850-23-200. Sand, Gravel and Cinders Permits Issued on Agency Lands.

1. The agency may issue permits or may convey profits a prendre or similar interests on all trust lands, and, when the agency deems it consistent with agency land use plans and trust responsibilities.
2. The agency may issue permits when the sale of the permitted materials would be exempt from sales tax under Subsection 59-12-104(2) or 59-12-104(28).
3. The agency may issue profits a prendre in all other instances according to the procedures and provisions of this chapter.

R850-23-300. Rentals and Royalties.

1. Rentals.
 - (a) Rental rates shall be \$10 per acre, or fractional part thereof, per annum.
 - (b) The minimum annual rental on permits shall be determined periodically by the agency pursuant to board policy.
2. Royalty Rates and Provisions.
 - (a) The agency shall charge full market value for all permitted materials purchased under a sand, gravel or cinders permit. Market value will be determined by the agency through analysis of the local market.
 - (b) The agency, pursuant to board policy, may annually establish minimum royalty rates for permits based on the type of permitted material being removed.
 - (c) Royalty payments shall be remitted to the agency on a quarterly basis or on such other basis as may be required by the terms and conditions of the permit and shall be accompanied by an agency approved "Production and Settlement Transmittal Form."

R850-23-400. Terms of Sand, Gravel and Cinders Permits.

Permits issued under these rules shall be issued for a term which allows for the most beneficial use of the resource, as specified in the terms and conditions of the permit, but no longer than necessary to accomplish the extraction and removal of the materials subject to the sale, and to accomplish any required reclamation work. In no event shall a permit continue for a period of longer than five years without readjustment in its terms and conditions, by the director, as may be determined to be in the best interest of the trust beneficiaries.

R850-23-500. Application Procedures.

1. Application Filing.
 - (a) Applications for permits may be submitted to any office of the agency during office hours pursuant to R850-3.
 - (b) The director may approve applications for permits for common varieties of sand, gravel or cinders in accordance with the bid solicitation process described in R850-23-500(2), subject to rule R850-23-1400, Over-the-Counter Sales.
2. Bid Solicitation Processes.
 - (a) In the absence of any valid permit, or any valid lease for the same commodity upon the same land, the agency may offer for competitive bid permits when exposing the site to the market could reasonably be expected to produce permitted materials sales. A notice of lands available for competitive filing for permits shall be made in a manner to reasonably solicit competitive bid applications. Notices of competitive filing shall contain the procedure by which the agency shall award the permit.
 - (b) Upon acceptance of any permit application for common varieties of sand, gravel, or cinders the agency shall solicit competing applications through publication at least once a week for two consecutive weeks in one or more newspapers of general circulation in the county in which the permit is offered. At least 30 days prior to bid opening, certified notification will be sent to permittees of record, adjacent permittees/lessees, and adjacent landowners. Notices will also be posted in the local governmental administrative building or the county courthouse. Notification and advertising shall include the legal description of the parcel and any other information which may create interest in the parcel. The successful applicant shall bear the cost of the advertising.
 - (c) The agency shall allow all applicants at least 20 days from the date of mailing of notice, as evidenced by the certified mail posting receipt (Postal Service form 3800), within which to submit a sealed bid containing their proposal for the subject parcel. Competing bids shall be evaluated using the criteria found in R850-30-500(2)(g), R850-80-500, and R850-90-200, for special use leases, sales, or exchanges, respectively.
 - (d) If no competing applications involving sale, lease or exchanges are received by the deadline published pursuant to R850-23-500(2)(b), then the agency shall award the permit based on the following criteria:
 - i) amount of bonus bid;
 - ii) amount and rate of proposed materials extraction; and
 - iii) other criteria and assurances of performances as the agency shall require by permit or advertise prior to bidding.

R850-23-600. Permit Execution.

The permit shall be executed by the applicant and returned to the agency within 30 days from the date of applicant's receipt of the permit. Failure to execute and return the documents to the agency within the 30-day period may result in cancellation of the permit, the forfeiture of any fees, and the discharge of any obligation of the agency arising from the approval of the application.

R850-23-700. Sand, Gravel and Cinders Permit Provisions.

Each permit shall contain provisions necessary to ensure responsible surface management including, but not limited to, the following provisions: The rights of the permittee; rights reserved to the permitter; the term of the permit; payment obligations; transfers of permit interest by permittee; permittee's responsibility for reclamation;

terms and conditions of permit forfeiture; and protection of the agency from liability from all actions of the permittee.

R850-23-800. Bonding Provisions.

Prior to the issuance of a permit, or for good cause shown at any time during the term of the permit, and upon 30 days written notice, the applicant or permittee, as the case may be, may be required to post with the agency a bond in the form and amount as may be determined by the agency to assure compliance with all terms and conditions of the permit.

1. All bonds posted on permits may be used for payment of all monies, rentals, and royalties due to the agency, also for costs of reclamation and for compliance with all other terms and conditions of the permit, and rules pertaining to the permit. The bond shall be in effect even if the permittee has conveyed all or part of the permit interest to a sub-lessee, assignee, or subsequent operator until such time as the permittee fully satisfies the permit obligations, or until the bond is replaced with a new bond posted by the sub-lessee or assignee.

2. Bonds may be increased in reasonable amounts, at any time as the agency may decide, provided the agency first gives permittee 30 days written notice stating the increase and the reason(s) for such increase.

3. Bonds may be accepted in any of the following forms at the discretion of the agency:

(a) Surety bond with an approved corporate surety registered in Utah.

(b) Cash deposit. However, the agency will not be responsible for any investment returns on cash deposits.

(c) Certificates of deposit in the name of "School and Institutional Trust Lands Administration and permittee, c/o permittee's address", with an approved state or federally insured banking institution registered in Utah. Such certificate of deposit must have a maturity date no greater than 12 months, be automatically renewable, and be deposited with the agency; the permittee will be entitled to and receive the interest payments. All certificates of deposit must be endorsed by the permittee prior to acceptance by the director.

(d) Other forms of surety as may be acceptable to the agency.

R850-23-900. Insurance Requirements.

Prior to the issuance of a permit for sand, gravel and cinders, the applicant may be required to obtain insurance of a type and in an amount acceptable to the agency. Proof of insurance shall be in the form of a certificate of insurance containing sufficient information to satisfy the agency that insurance provisions of the permit have been complied with.

1. Such insurance, if required, shall be placed with an insurer with a financial rating assigned by the Best Insurance Guide of A:X or higher, unless this requirement is waived in writing by the agency.

2. The agency shall retain the right to review the coverage, form, and amount of the insurance required at any time and to require the permittee to obtain insurance sufficient in coverage, form, and amount to provide adequate protection upon 30 days written notice.

R850-23-1000. Plans of Operation.

1. Prior to the commencement of any activity authorized by a permit the permittee shall submit, for the director's approval, a plan of operations which shall include the following:

(a) A map or plat showing:

(i) the location and sequence of areas from which material is to be excavated;

(ii) the location of any processing or stationary equipment or improvements which will be placed on the premises;

(iii) transportation and access routes across the premises and adjacent properties;

(iv) the location of any fuel storage tanks; and

(v) the location of stockpile areas.

(b) Elevation drawings of the premises before and after the excavation of materials.

(c) Reclamation plans acceptable to the director, upon review by the School and Institutional Trust Lands Administration.

(d) Copy of any required notification of the proposed operation to the Utah Division of Oil, Gas and Mining and all other government agencies.

(e) Copy of notification of the proposed operation to the owner of the surface estate, owners of the mineral estate, and to all other parties having any valid existing lease or permit upon the same lands.

2. Within 60 days of receiving such plan of operation, the agency shall review the plan and request any additional information necessary to complete the review. The permittee shall not commence any operations which may disturb the lands until the agency has reviewed the plan of operation submitted by the permittee and has given its written approval to the permittee for the commencement of such operations.

3. Each permittee holding a current permit shall within 30 days of each annual anniversary date of the issuance of the permit, submit to the agency a report of all activities under the permit for the previous year. Such report shall include a description of new excavations and surface disturbances, the type and quantity of the materials produced and sold or stockpiled, a description of mined land reclamation work completed or in progress, and any other information requested by the agency to reasonably monitor the permittee's operations under the permit.

R850-23-1050. Conduct of Operations and Compliance with Rules.

All exploration, mining or other operations performed under any permit, shall be performed in a good and workman like manner to ensure the conservation of the materials deposits, all other deposits of common and uncommon varieties of mineral resources, and other natural resources upon the lands. Each permittee of a permit shall at all times take whatever measures are necessary to be in compliance with all applicable rules of any federal or state agency pursuant to the activities and operations of the permittee or operator upon the lands.

R850-23-1100. Existing Lease and Permit Conversion.

Existing sand and gravel leases or permits issued prior to the effective date of these rules and in good standing on such date shall continue for the term specified in the lease or permit and shall be subject to the conditions and provisions contained in the lease or permit; provided, however, the agency may allow such lessees/permittees to convert such existing leases or permits to the new permit, providing such conversion will not conflict with the valid existing rights of any other lessee or permittee or owner upon the same lands.

R850-23-1200. Sand, Gravel and Cinders Permit Assignments.

A permit may be assigned to any person, firm, association, or corporation qualified under R850-3-200, provided that the assignments are approved by the agency; and no assignment is effective until written approval is given. Any assignment made without such approval is void.

1. An assignment shall take effect the day of the approval of the assignment. On the effective date of any assignment, the assignee is bound by the terms of the permit to the same extent as if such assignee were the original grantee, any conditions in the assignment to the contrary notwithstanding.

2. An assignment must be a sufficient legal instrument, properly executed and acknowledged, and should clearly set forth the easement number, and land involved, and the name and address of the assignee.

3. An assignment shall be executed according to agency procedures.

R850-23-1300. Reclamation Requirements.

Following the completion of excavations, the agency shall require reclamation measures to stabilize and restore natural surface conditions. Reclamation measures will generally consist of, but not necessarily be limited to, sloping and stabilization of highwalls, contouring of slopes at a ratio not greater than three feet horizontal for each one foot vertical or as otherwise specified by the agency, stabilization of access roads or the closure of access roads as determined by the agency, replacement of natural topsoils, revegetation using a seed mixture and rate of application as may be specified by the agency, removal of all trash and debris, and the prompt removal of all equipment, buildings, and structures owned by the permittee or permittee's agents.

R850-23-1400. Over-the-Counter Sales.

Permits for common varieties of sand, gravel, or cinders may be issued on an "over-the-counter" basis in areas which have been designated by the director as open for such sales.

R850-23-1500. Termination of Sand, Gravel and Cinders Permit.

Any permit issued by the agency on trust land may be terminated in whole or in part for failure to comply with any term or condition of the permit or applicable laws or rules. Upon determination by the director that a permit is subject to termination pursuant to the terms of the permit or applicable laws or rules, the director shall issue an appropriate instrument terminating the permit.

R850-23-1600. Collection of Sales Tax.

The agency shall require all permittees not exempt pursuant to Section 59-12-104 to remit sales taxes with the "Production and Settlement Transmittal Form" submitted pursuant to R850-23-300(2)(c).

KEY: sand, gravel, cinders, permit provisions**April 1, 2005****53C-1-302(1)(a)(ii)****Notice of Continuation April 1, 2015****53C-2-201(1)(a)****53C-4-101(1)**

R850. School and Institutional Trust Lands, Administration.
R850-24. General Provisions: Mineral and Material Resources, Mineral Leases and Material Permits.
R850-24-100. 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-2-402(1) of the School and Institutional Trust Lands Management Act which authorize the Director of the School and Institutional Trust Lands Administration to establish rules for the issuance of mineral leases or material permits and management of trust lands and mineral and material resources.

R850-24-125. Planning.

Pursuant to Subsection 53C-2-201(1)(a), this category of activity carries no planning obligations by the agency beyond existing rule-based analysis and approval processes. Mineral and material development activities are regulated pursuant to R645, R647, and R649.

R850-24-150. Scope - Mineral Estate Distinctions.

1. For purposes of this section, mineral and material resources include all hardrock minerals and building stone; coal; and geothermal resources. Additional rules specific to these categories are found in section R850-25 for hardrock and material resources; section R850-26 for coal; and section R850-27 for geothermal resources. These general provisions do not cover oil, gas and hydrocarbons; bituminous-asphaltic sands and oil shale; or sand, gravel and cinders.

2. Common varieties of sand and gravel and volcanic cinder are not considered part of the mineral estate on trust lands in Utah. These commodities may only be obtained through a sand and gravel or volcanic cinder permit approved by the agency, pursuant to Section R850-23.

R850-24-175. Definitions.

The following words and terms, when used in sections R850-24 through R850-27 of this chapter shall have the following meanings, unless otherwise indicated:

1. Act: the School and Institutional Trust Lands Management Act, Utah Code Sections 53C-1 et seq.

2. Agency: School and Institutional Trust Lands Administration or its predecessor agency.

3. Anniversary Date: the same day and month in succeeding years as the effective date of the lease or permit.

4. Assignments and Transfers of Interest:

(a) Assignment: a transfer of all or a portion of the lessee's/permittee's record title interest in a mineral lease or material permit.

(b) Assignment of Overriding Interests: a transfer of an interest in a mineral lease or material permit that creates a right to share in the proceeds of production from the lease or permit, but confers no right to enter upon the leased or permitted lands or to conduct exploration, development or mining operations on the lands.

(c) Partial Assignment: an assignment of the lessee's record title interest in a part of the lands in a mineral lease or material permit and a segregation of the assigned lands into a separate lease or permit.

(d) Sublease/Operating Rights Assignment: a transfer of a non-record title interest in a mineral lease or materials permit, which authorizes the holder to enter upon the leased or permitted lands to conduct exploration, development and mining operations, but does not alter the relationship imposed by a lease on the lessor and the lessee.

(e) Transfer of Interest: any conveyance of an interest in a mineral lease or material permit by assignment, partial assignment, sublease, operating rights assignment, or other agreement.

5. Beneficiaries: the public school system and other institutions for whom the State of Utah was granted lands in trust by the United States under the Utah Enabling Act.

6. Board of Trustees: the board created under Utah Code Section 53C-1-202.

7. Bonus Bid: a payment reflecting an amount to be paid by the applicant in addition to the rentals and royalties set forth in a lease or permit as consideration for the issuance of such lease or permit.

8. Designated Operator: the person or entity that has been granted authority by the record title interest owner(s) in a lease or permit and has been approved by the agency to conduct operations on the lease, permit or a portion thereof.

9. Director: the director as defined in Utah Code Subsection 53C-1-103(3) and Sections 53C-1-301 - 303, or a person to whom the director has delegated authority.

10. Effective Date: unless otherwise defined in the lease or permit, the effective date shall be the first date of the month following the date a lease or permit is executed. An amended, extended, segregated or readjusted lease or permit will retain the effective date of the original lease or permit.

11. Lessee: a person or entity holding a record title interest in a mineral lease under R850-25, coal lease under R850-26, or geothermal steam lease under R850-27.

12. Mining Unit: a consolidation of trust mineral lands approved by the director forming a logical exploration, development, or mining operation.

13. Other Business Arrangement (OBA): an agreement entered into between the agency and a person or entity consistent with the purposes of the Act and approved by the Board of Trustees. By way of example, but not of limitation, OBAs may be for farmout agreements or joint venture agreements. An agreement for an OBA may be initiated by the agency or by a proponent of an agreement by filing a proposal for an OBA with the agency's assistant director for minerals or other designated person.

14. Over-the-Counter Permits: the issuance of a material permit through open sales on a first-come, first-served basis.

15. Permittee: a person or entity holding a record title interest in a material permit under R850-25.

16. Record Title Interest: a lessee's/permittee's interest in a lease/permit which includes the obligation to pay rent, the rights to assign or relinquish the lease/permit, and the ultimate responsibility to the agency for obligations under the lease or permit.

17. Sublease: a transfer of a non-record title interest in a mineral lease or material permit.

18. Surveyed Lot: an irregular part of a section identified by cadastral survey and maintained in the official records of the agency.

19. Trust Lands: those lands and mineral resources granted by the United States in the Utah Enabling Act to the State of Utah in trust, and other lands and mineral resources acquired by the trust, which must be managed for the benefit of the state's public education system or the institutions designated as beneficiaries.

20. UDOGM: the Division of Oil, Gas and Mining of the Utah Department of Natural Resources.

R850-24-200. Insurance Requirements.

Prior to the issuance of a permit or lease for mineral and material resources, the applicant may be required to obtain insurance of a type and in an amount acceptable to the agency. Proof of insurance shall be in the form of a certificate of insurance containing sufficient information to satisfy the agency that insurance provisions of the permit have been complied with.

1. Such insurance, if required, shall be placed with an insurer with a financial rating assigned by the Best Insurance Guide of A:X or higher, unless this requirement is waived in writing by the agency.

2. The agency shall retain the right to review the coverage, form, and amount of the insurance required at any time and to require the permittee to obtain insurance sufficient in coverage, form, and amount to provide adequate protection upon 30 days written notice.

R850-24-400. Preference Rights for Unleased Mineral or Material.

1. Any lessee or permittee who discovers any mineral or material on lands leased or permitted from the agency which are not included within that lease or permit shall have a preference right to a lease or permit covering the unleased mineral or unpermitted material, provided the unleased mineral or unpermitted material at the time of discovery is not included within a lease or permit application by another party.

2. The preference right lease or permit is subject to the rental, royalty, and development requirements provided in these rules and in the lease or permit form.

3. The preference right shall not extend to any unleased mineral or unpermitted material which have been withdrawn from leasing or permitting.

4. The preference right shall continue for a period of 60 days after the discovery of the unleased mineral or unpermitted material, provided the applicant notifies the agency within ten (10) days after the discovery and makes application to lease the unleased mineral or permit the unpermitted material within the sixty (60) day period after date of discovery.

R850-24-500. Multiple Mineral and Material Development (MMD) Area.

The agency may designate any land under its authority as a multiple mineral development area (MMDA).

1. In designated MMDAs, the agency may require, in addition to all other terms and conditions of a mineral lease or material permit, that the lessee or permittee in an area capable of multiple mineral or material development furnish a bond beyond that required in subsection R850-24-600(1)(a) or evidence of financial responsibility as specified by the agency, to assure that the agency and other mineral lessees, material permittees, sand and gravel permittees under R850-23, or bituminous-asphaltic sands lessees under R850-22 be indemnified and held harmless from and against all unreasonable and unnecessary damage to the leased resource, mineral or material deposits or improvements caused by the conduct of the lessee/permittee on trust lands.

2. Where a lessee/permittee intends to conduct multiple mineral or material development activities, the lessee/permittee shall:

(a) submit advance written notice to the agency and to other lessees/permittees holding a lease or permit for any mineral commodity within the MMDA of any activities that are to occur within the multiple mineral or material development area.

3. All activities within the MMDA are to be deferred until the agency has specified the terms and conditions under which the mineral activity is to occur and has granted specific written permission to conduct the activity.

4. To preserve the value of the mineral or material resources, the agency may impose additional requirements upon any lessee/permittee, or designated operator who intends to conduct any multiple mineral or material development activity within a multiple mineral or material development area.

5. The agency may hold public meetings regarding the mineral or material development in a multiple mineral or material development area.

6. The agency may grant an extension to a mineral lease or material permit in a multiple mineral or material development area provided that the mineral lessee, material permittee, or designated operator requests an extension prior to the expiration date of the lease or permit, and that the lessee, permittee, or designated operator would have otherwise been able to request a mineral lease or material permit extension as provided in the Act.

R850-24-600. Bonding.

1. Bond Obligations.

(a) Prior to commencement of any operations which will disturb the surface of the land covered by a mineral lease or material permit, the lessee, permittee, or designated operator shall post with the Utah Division of Oil, Gas and Mining a bond in the form and in the amount set forth in R647-3-1 et seq. and approved by UDOGM to

assure compliance with those terms and conditions of the mineral lease or material permit involving costs of reclamation, damages to the surface and improvements on the surface, and all other requirements and standards set forth in the mineral lease, material permit, rules, procedures, and policies of the agency and the Utah Division of Oil, Gas, and Mining.

(b) A separate bond may be posted with the agency by the lessee or the designated operator to assure compliance with all remaining terms and conditions of the lease or permit not covered by the bond to be filed with UDOGM, including but not limited to payment of rentals and royalties.

(c) These bonds shall remain in effect even if the mineral lessee, material permittee, or designated operator has conveyed all or part of the leasehold interest to a sublessee(s), assignee(s), or subsequent operator(s), until the bond is released by UDOGM or the agency either because the lessee, permittee, or designated operator has fully satisfied the bonding obligations set forth in this section or the bond is replaced with a new approved bond posted by a sublessee, assignee, or new designated operator.

(d) The agency may waive the filing of a bond for any period during which a bond meeting the requirements of this section is on file with another agency.

(e) Bonds held by the agency shall be in the form and subject to the requirements set forth herein:

(i) Surety Bonds: shall be issued by a qualified surety company, approved by the agency and registered in the state of Utah;

(ii) Lessee/Permittee Bonds: shall be accompanied by:

(A) a cash deposit to the School and Institutional Trust Lands Administration. The agency will not be responsible for any investment returns on cash deposits. Such interest will be retained in the account and applied to the bond value of the account unless the agency has approved the payment of interest to the operator; or

(B) a cashier's check made payable to the School and Institutional Trust Lands Administration; or

(C) negotiable bonds of the United States, a state, or a municipality. The negotiable bond shall be endorsed only to the order of, and placed in the possession of, the agency. The agency shall value the negotiable bond at its current market value, not at the face value; or

(D) negotiable certificates of deposit. The certificates shall be issued by a federally insured bank authorized to do business in Utah. The certificates shall be made payable or assigned only to the agency both in writing and upon the records of the bank issuing the certificate. The certificates shall be placed in the possession of the agency or held by a federally insured bank authorized to do business in Utah. If assigned, the agency shall require the banks issuing the certificates to waive all rights of setoff or liens against those certificates; or

(E) an irrevocable letter of credit. Letters of credit shall be issued by a federally insured bank authorized to do business in Utah and will be irrevocable during their terms. Letters of credit shall be placed in the possession of and payable upon demand only to the agency. Letters of credit shall be automatically renewable or the operator shall ensure continuous bond coverage by replacing letters of credit, if necessary, at least thirty (30) days before their expiration date with other acceptable bond types or letters of credit; or

(F) any other type of surety approved by the agency.

2. Increased amount of bonds.

The agency may increase the required bond amount at any time. The lessee, permittee, or designated operator shall be given thirty (30) days written notice stating the reason(s) for the increase and the new bond amount.

3. Bond Default.

(a) Where, upon default, the surety makes a payment to the agency of an obligation incurred under the terms of a mineral lease or material permit, the face of the bond and the surety's liability shall be reduced by the amount of such payment.

(b) After default, where the obligation in default equals or is less than the face amount of the bond(s), the lessee, permittee, or the designated operator, shall either post a new bond, restore the existing

bond to the amount previously held, or post an adjusted amount as determined by the agency. Alternatively, the lessee, permittee, or designated operator, shall make full payment to the agency for all obligations incurred that are in excess of the face amount of the bond and shall post a new bond in the amount previously held or such other amount as determined by the agency. Operations shall be discontinued until the restoration of a bond or posting of a new bond occurs. Failure to comply with these requirements may subject all mineral leases or material permits covered by such bond(s) to be cancelled by the agency.

(c) The agency will not give consent to termination of the period of liability of any bond unless an acceptable replacement bond has been filed or until all the terms and conditions of the mineral lease or material permit have been met.

(d) Any lessee, permittee, or designated operator forfeiting a bond shall be denied approval of any future exploration or mining on trust-owned lands, except by compensating the agency for previous defaults and posting the full bond amount required by the agency.

R850-24-700. Operations Plan and Reclamation.

1. All lessees, permittees or designated operators shall submit to the agency, and receive approval for, a plan of operations prior to any surface disturbance, drilling or other operations which disturb the surface of trust lands subject to a lease or permit. The operations plan shall include at a minimum proposed access and infrastructure locations and proposed site reclamation. Prior to approval, the agency may require the lessee, permittee or designated operator to adopt a special rehabilitation program for the particular property in question. Before the lessee, permittee or designated operator shall commence actual operations or prior to commencing any surface disturbance associated with the activity on lands subject to a lease or permit, the permittee, lessee or designated operator shall provide a plan of operations to the agency simultaneously with the filing of any required plan of operations or permit application with UDOGM. The agency will review any request for approval of operations and will grant approval providing that the proposed location and operations are not in violation of any rules or order of the agency. Before operations can commence, approval must be granted by the UDOGM, if required by statute, and by the agency. Notice of approval by the agency shall be given in an expeditious manner to UDOGM.

2. Prior to approval of any surface disturbing operation, the agency may require the lessee, permittee or designated operator to:

(a) provide when requested, a cultural, paleontological and biological survey on lands under lease or permit, including providing the agency a copy of any survey(s) required by other governmental agencies;

(b) provide for reasonable mitigation of impacts to other trust resources occasioned by surface or sub-surface operations on the lease;

(c) negotiate with the agency a surface use agreement, right-of-way agreement, or both for trust lands other than the leased or permitted lands, where the surface of said lands are necessary for the development of the lease or permit.

3. Maintain a record of geologic data accumulated or acquired by the lessee, permittee or designated operator concerning the land described in the lease or permit. This record shall show the formations encountered and any other geologic or development information reasonably required by the agency and shall be available upon request by the agency. A copy of the record, as well as any other data related to geologic exploration or resource development on trust lands shall be deposited with the agency at the agency's request.

4. All operation which disturbs the surface of lands contained within or on trust lands shall be required to be reclaimed by rehabilitation of the disturbed area as described in the plan of operations approved by the agency, and as required by the laws administered by the UDOGM or as required by any other state or federal agency.

(a) In all cases, at a minimum, the lessee, permittee or designated operator shall agree to establish a slope on all excavations

to a ratio not steeper than one foot vertically for each two feet of horizontal distance, unless otherwise approved by the agency and UDOGM prior to commencement of operations. The establishment of a stable slope shall be a concurrent part of the operation of the leased or permitted premises such that operations shall at no time constitute a hazard. All pits, excavations, roads and pads shall be shaped to facilitate drainage and control erosion by following the best management practices.

(b) In no case shall the pits or excavations be allowed to become a hazard to persons or livestock. All material removed from trust lands shall be stockpiled and be used to fill the pits and for leveling and reclamation of roads and pads unless consent of the agency, and if applicable of UDOGM, to do otherwise is obtained, so at the termination of the lease, the land will as nearly as practicable approximate its original horizontal and vertical configuration. All drill holes must be plugged in accordance with rules promulgated by UDOGM.

(c) The agency shall require of the lessee, permittee or designated operator that all topsoil in the area of surface disturbance be removed, stockpiled, and stabilized on the trust lands until the completion of operations and satisfactory use in reclamation. At the time of reclamation, the stockpiled topsoil shall be redistributed on the area of surface disturbance and the land revegetated as prescribed by the UDOGM and the agency. All mud pits and temporary debris and settlement basins shall be filled and materials and debris removed from the site.

5. All lessees, permittees or designated operators shall be responsible for compliance with all laws and notification requirements and operating rules promulgated by UDOGM or any other federal or state agency that may have regulatory jurisdiction over mineral development on trust lands or the leased or permitted substance.

R850-24-800. Transfer by Assignment, Sublease or Otherwise and Overriding Royalties.

Any mineral lease or material permit may be transferred as to all or part of the acreage, to any person, or entity firm, association, or corporation qualified to hold a lease or permit, provided however, that all transfers of interest are approved by the director. No transfer of interest is effective until written approval is given. Any transfer of interest made without approval is void.

1. The director shall not withhold approval of any transfer of interest which has been properly executed, for which the required filing fee has been paid for each separate lease or permit in which an interest is transferred, and the transfer complies with the law and these rules, unless the director determines that approval would interfere with the development of the mineral or material resources, or be detrimental to the interests of the trust beneficiaries.

(a) If approval of any transfer is withheld by the director, the transferee shall be notified of such decision and the reason(s) therefore. Any decision to withhold approval may be appealed pursuant to R850-8 or any similar rule in place at the time of such decision.

2. Unless otherwise authorized by the agency, a transfer of interest of a portion of a mineral lease or material permit covering less than a quarter-quarter section, a surveyed lot, an assignment of a separate zone or of a separate deposit will not be approved.

3. A transfer of interest shall take effect the first day of the month following the approval of the transfer by the director. The assignor, sublessor or surety, if any, shall continue to be responsible for performance of any and all obligations as if no transfer of interest had been executed until the effective date of the transfer. After the effective date of any transfer, the transferee is bound by the terms of the mineral lease or material permit to the same extent as if the transferee were the original lessee/permittee, any conditions in the transfer agreement to the contrary notwithstanding.

4. A partial assignment of any mineral lease or material permit shall segregate the assigned or retained portions thereof and, after the effective date, release or discharge the assignor from any obligation thereafter accruing with respect to the assigned lands.

Segregated leases or permits shall continue in full force and effect for the primary term of the original lease or permit or as further extended pursuant to the terms of the lease or permit.

(a) The agency may re-issue a lease with a new lease number covering the assigned lands for the remaining unexpired primary term. The agency may, in lieu of re-issuing a lease, note the partial assignment in its records with all lands covered by the original lease maintained with the original lease number, and with each separate tract or interest resulting from an assignment with an additional identifying designation to the original lease number.

5. A transfer of interest in a mineral lease or material permit or of an overriding royalty must be a good and sufficient legal instrument, properly executed and acknowledged, and shall clearly set forth the serial number of the lease or permit, the land involved, the name and address of the transferee, and the interest transferred.

6. A transfer of interest must affect or concern only one mineral lease or material permit or a portion thereof.

7. Any transfer of interest which would create a cumulative overriding royalty in excess of 20% will not be approved by the agency. Any agreement to create or any assignment creating overriding royalties or payments out of production removed or sold from the leased or permitted lands is subject to approval by the agency, after notice and hearing, to require the proper parties thereto to suspend or modify the royalties or payments out of production in such a manner as may be reasonable when and during such period of time as they may constitute any undue economic burden upon the reasonable operations of the mineral lease or material permit.

8. Mineral lessees or material permittees who are transferring an interest in their mineral lease or material permit shall:

(a) prepare and execute the transfer of interest agreement(s) in duplicate, complete with acknowledgments;

(b) provide that each copy of the transfer of interest agreement have attached thereto an acceptance of transfer duly executed by the transferee; and

(c) provide that all transfer of interest agreements forwarded to or deposited with the agency be accompanied by the prescribed fee.

9. If an applicant, lessee, or permittee dies, his/her rights shall be transferred to the heirs, devisees, executor or administrator of the estate, as appropriate, upon the filing of a death certificate together with other appropriate documentation as the agency may require to verify change of ownership, and a list, by serial number of all mineral lease or material permit interests affected and a statement that all parties are qualified to do business with the agency. The required filing fee must be paid for each separate mineral lease or material permit in which an interest is transferred. A bond rider or replacement bond may be required by the agency for any bond(s) previously furnished by the decedent.

10. If a corporate merger affects mineral leases or material permits where the transfer of property of the dissolving corporation to the surviving corporation is accomplished by operation of law, no transfer of any affected lease permit is required. A notification of the merger shall be furnished with a list, by serial number of all lease or permit interests affected. The required filing fee must be paid for each separate lease or permit in which an interest is transferred. A bond rider or replacement bond conditioned to cover the obligations of all affected corporations may be required by the agency as a prerequisite to recognition of the merger.

11. If a change of name of a lessee or permittee affects mineral leases or material permits the notice of name change shall be submitted in writing with appropriate documentation evidencing the name change accompanied by a list of leases or permits affected by the name change. The required filing fee must be paid for each separate lease or permit subjected to a transfer of interest. A bond rider or replacement bond to accommodate the name change, conditioned to cover the obligations of all affected corporations may be required by the agency as a prerequisite to recognition of the change of name.

12. Pre-approval by the agency of a transfer of interest may be sought by the lessee/permittee, and if pre-approval is granted in writing by the director, it shall be binding on the agency subject to

conclusion of the particular transfer for which such pre-approval was granted.

R850-24-900. Lease Non-Execution or Cancellation - Fees Forfeited.

In the event that applicant fails to sign and return a mineral lease or material permit as instructed by the agency, or a lease is cancelled for any other reason, all fees, advance rentals, and advance minimum royalties are forfeited by the applicant, lessee or permittee unless non-forfeiture or a refund is approved by the director.

R850-24-1000. Readjustment of Leases and Permits.

1. All mineral leases and material permits shall contain a provision setting forth the agency's right to readjust the terms and provisions of the mineral lease or the material permit on a periodic basis. The director shall establish as a term of the lease or the permit a schedule for readjustment at the time the lease or permit is offered. A mineral lease which is continued beyond its primary term shall remain subject to such readjustment provision(s).

2. All terms and conditions of a mineral lease and a material permit are subject to readjustment by the agency, including the amount of rent, minimum rental, royalty, minimum royalty, or any other provision as provided in the lease or permit.

3. The terms of the mineral lease or material permit, if readjusted, shall become effective as of the anniversary date specified for readjustment set forth in the lease or permit upon written notification of the readjusted terms.

4. Notice of intent to exercise the agency's right to readjust under the terms of the lease or permit as of the specified anniversary date is timely given if given in writing prior to the specified anniversary date set forth in the lease or permit.

5. The agency shall have up to one year after exercising its option to readjust to review and communicate in writing the final terms of the lease or permit as readjusted.

6. Unless otherwise approved by the director, the lease or permit shall incorporate the terms of the current agency mineral lease or material permit form at the time of readjustment.

7. Failure of the lessee or permittee to accept or appeal the terms of any readjustment within 60 days of mailing by the agency to the last known address of the lessee or permittee, as reflected in the records of the agency, shall be considered a violation of the terms of the lease or permit and shall subject the same to forfeiture.

8. In the event of a conflict between this section and the terms of a readjustment provision in any lease or permit, the lease or permit terms shall supersede to the extent of the conflict.

9. A lessee or permittee may request a readjustment of a lease or permit, and if the director finds the readjustment to be in the best interest of the beneficiaries, such readjustment shall be made.

KEY: mineral leases, material permits, mineral resources, lease operations

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53C-2-201(1)(a)

53C-2-402(1)

R850. School and Institutional Trust Lands, Administration.

R850-25. Mineral Leases and Materials Permits.

R850-25-100. Classification of Mineral and Material Substances.

Mineral leases and material permits shall be issued in accordance with the classifications described below. No mineral leases will be issued in conflict with this classification.

1. Mineral Classification.

(a) **Metalliferous Minerals:** shall include aluminum, antimony, arsenic, beryllium, bismuth, chromium, cadmium, cesium, columbium, cobalt, copper, fluor spar, gallium, gold, germanium, hafnium, iron, indium, lead, mercury, manganese, molybdenum, nickel, platinum, group metals, radium, silver, selenium, scandium, rare earth metals, rhenium, tantalum, tin, thorium, titanium, tungsten, thallium, tellurium, vanadium, uranium, ytterbium, zinc, and zirconium.

(b) **Potash:** shall include the chlorides, sulfates, carbonates, borates, silicates, and nitrates of potassium.

(c) **Phosphate:** shall mean any phosphate rock containing one or more phosphate minerals such as calcium phosphate and shall include all phosphatized limestones, sandstones, shales, and igneous rock.

(d) **Clay Minerals:** shall mean a fine grained, natural, earthy material composed primarily of hydrous aluminum silicates, plastic-like when wetted, rigid when dried en-masse, and vitrified when fired to a sufficiently high temperature, which shall include kaolin, bentonite, ball clay, fire clay, fuller earth, and clays and clay minerals or shales having unique characteristics giving the mineral deposit distinct and special value, such as carbonaceous shale, humic shale, and baked shale, where the primary value or use is other than building, construction or landscaping.

(e) **Humic shale:** shall refer to a dark colored shaley material containing humic acids or small particles of carbon, original organic tissue or other carbonaceous matter derived from plants and distributed throughout the whole mass. This classification does not include oil shale, bituminous-asphaltic sands, or coal.

(f) **Limestone:** shall include sedimentary rock having a predominant composition chiefly composed of calcium carbonate or calcium magnesium carbonate where the primary value or use is other than building, construction, or landscaping.

(g) **Gemstone and Fossil:** shall include precious, semi-precious or collectable mineral, and petrified material or stone having intrinsic value derived from its attractiveness or uncommon characteristics. This designation includes agate, amber, beryl, calcite, chert, coral, corundum, diamond, feldspar, garnet, geodes, jade, jasper, olivine, opal, pearl, quartz, septarian nodules, spinel, spodumene, topaz, tourmaline, turquoise, and zircon; and coquina, petrified wood, trilobites, and other common fossilized flora and invertebrate fauna.

(h) **Gypsum:** a natural hydrated calcium sulfate that includes alabaster, anhydrite, gypsite, satin spar, and selenite

(i) **Gilsonite:** a solid asphaltum found in place, in a vein, a lode, or rock.

(j) **Volcanic Material:** includes volcanic pyroclastic material such as ash, blocks, bombs, and tuff; glassy volcanic glass material including obsidian, perlite, pitchstone, pumice, scoria, and vitrophyre; and other uncommon volcanic materials where the primary value or use is other than building, construction, or landscaping.

(k) **Industrial Sands:** includes uncommon, naturally occurring sands having properties or containing minerals having special use in industrial processes or applications as determined by the director. This designation includes abrasive sands, filler sands, foundry sands, frac sands, glass sands, lime sands, magnetic sands, and silica sands.

(l) **Mineral Salts:** shall include all naturally occurring salts.

2. Material Classification.

(a) Material permits may be issued for common varieties of clay or stone having a primary value or use in building, construction, or landscaping, including basalt, common clay, conglomerate, flagstone, gabbro, granite, lava aggregate, limestone, marble, onyx, quartzite, rhyolite, rip-rap, sandstone, serpentine, shale, slate, soapstone, trapstone, travertine, whether crushed, sized, dimensioned, or unprocessed, and when the director deems it consistent with agency plans and trust responsibilities.

(b) No material permits will be issued in conflict with the Mineral Lease Classification under R850-25-100(1).

3. Non-Classified Minerals or Materials.

Mineral leases or material permits may also be issued for minerals or materials not listed under Subsections R850-25-100(1) and (2) at the discretion of the director. Alternatively, the director may issue a mineral lease or material permit for a non-classified mineral or material that is closely associated with a classified mineral or material so long as the mineral or material is specified as a leased or permitted substance in the mineral lease or material permit.

4. Close Association Minerals or Materials.

A mineral lease or material permit may include other minerals or materials found in close association with the expressly leased mineral or permitted material, when the substance cannot reasonably be mined separately or mined and separated.

5. Multiple Classified Minerals.

Mineral leases may also be issued to include a combination of classified minerals.

R850-25-200. Mineral Lease Issuance.

1. The director may issue mineral leases competitively, non-competitively or enter into joint ventures or other business arrangements for the disposition of mineral deposits in accordance with the Act.

2. A mineral lease shall not be issued for a parcel less than a quarter-quarter section or surveyed lot unless approved by the director.

3. Mineral leases shall be limited to no more than 2,560 acres or four sections unless approved by the director.

4. A mineral lease may be terminated by the director in whole or part for lessee's failure to comply with any term or condition of the lease or applicable laws and rules.

R850-25-300. Mineral Lease Provisions.

1. Rentals and Rental Credits.

(a) The director shall establish the rental rate for the primary lease term at the time the mineral lease is offered. The rental shall not be less than \$1 per acre per year.

(b) Rental payments shall be paid in advance each year on or before the mineral lease anniversary date, unless otherwise stated in the mineral lease.

(c) The minimum annual rental on any mineral lease shall not be less than \$500.

(d) The rental payment for a mineral lease year may be credited against production royalties only as they accrue for that lease year, unless otherwise provided for in the mineral lease.

(e) Any overpayment of rental occurring from the mineral lease applicant's incorrect listing of acreage of lands described in the application may, at the option of the director, be credited toward the applicant's rental account.

(f) The director shall accept rental payments made by any party, but the acceptance of rental shall not be deemed to be recognition of any interest of the payee in the lease.

2. Royalty and Minimum Royalty.

(a) The director shall establish the production royalty rate(s) at the time the mineral lease is offered.

(b) The director shall establish the annual minimum royalty rate(s) at the time the mineral lease is offered.

3. Primary Mineral Lease Term.

(a) The director shall establish the mineral lease primary term at the time the lease is offered.

(b) The primary lease term for any mineral lease shall not exceed ten (10) years unless approved as part of an OBA.

4. Continuance of Mineral Lease After Expiration of Primary Term.

A mineral lease shall be continued after the primary term has expired so long as:

(a) the leased substance is being produced in paying quantities from the mineral lease or an approved mining unit; or

(b) the director determines that the lessee:

(i) is engaged in diligent operations, exploration, or development which is reasonably calculated to advance development or production of the leased substance; or

(ii) has made substantial financial investments for the direct purpose of advancing development or production of the leased substance; and

(iii) pays the annual minimum royalty set forth in the mineral lease.

5. Readjustment of Mineral Lease.

All mineral leases shall contain a provision setting forth the agency's right to readjust the terms and provisions of the mineral lease on a periodic basis, and such readjustment shall be made in accordance with R850-24-1000.

6. Other Lease Provisions.

The agency may require, in addition to the lease provisions required by these rules, any other provisions to be included in the mineral lease as it deems necessary.

R850-25-400. Material Permit Issuance.

1. The agency may issue material permits competitively, non-competitively, or enter into joint ventures or other business arrangements for the disposition of material deposits. In the event that a material permit is offered competitively and there are competing applications submitted, the agency will award the material permit based on the following criteria:

(a) amount of bonus bid;

(b) amount and rate of proposed materials extraction; and

(c) other criteria and assurances of performance as the agency shall require prior to bidding.

2. The agency may issue material permits "over-the-counter" in areas that have been designated by the director as open for such sales.

3. A material permit shall not be issued for a parcel less than one quarter-quarter section, or surveyed lot unless approved by the director.

4. Any material permit may be terminated by the agency in whole or part for permittee's failure to comply with any term or condition of the permit or applicable laws or rules.

R850-25-500. Material Permit Provisions.

1. Rentals.

(a) The director shall establish the rental rate for a material permit, which shall not be less than \$10 per acre, or fractional part thereof, per annum.

(b) The minimum annual rental on material permits shall be determined periodically by the agency.

2. Royalty and Minimum Royalty.

(a) The director shall establish the royalty rate based upon the agency's analysis of the local market for the commodity.

(b) The director will establish annual minimum royalty rates for material permits based on the type of material being removed. The agency may adjust the rates at any time in accordance with the terms of the permit.

3. Material Permit Term.

(a) Material permits issued under these rules shall be for a term as specified in the terms and conditions of the material permit.

(b) All material permits shall expire at the end of five years, unless otherwise specified in the permit. Upon request of the

permittee, the director may reissue the permit on the same terms or on readjusted terms. In no event shall a material permit continue for a period longer than five years without review and a determination by the director that reissuance on the same or readjusted terms is in the best interest of the beneficiaries.

4. Other Permit Provisions.

The director may require, in addition to the above permit provisions, other provisions to be included in the material permit as it deems necessary.

R850-25-600. Existing Mineral Lease and Material Permit Conversion.

Existing mineral leases and material permits issued prior to the effective date of these rules and in good standing on such date shall continue for the term specified in the lease or permit and shall be subject to the terms and provisions contained in the lease or permit. The agency may however, allow such lessees/permittees to convert such existing leases or permits to the new lease or permit, providing such conversion will not conflict with the valid existing rights of any other mineral lessee or material permittee or owner upon the same lands.

R850-25-700. Mineral Lease and Material Permit Application Process.

1. Applications for mineral leases or material permits, except in the case of competitive filing, are received for filing in the office of the agency during office hours. Except as provided, all the applications received by personal delivery over the counter, shall be immediately stamped with the exact date and time of filing. All applications presented for filing at the opening of the office for business on any business day shall be stamped received as of 8 a.m. on that day. All applications received in the first delivery of the U.S. Mail of each business day shall be stamped received as of 8 a.m. on that day. The time indicated on the time stamp is deemed the time of filing unless the agency determines that the application is materially deficient in any particular or particulars. If an application is determined to be deficient, it will be returned to the applicant.

2. Except in cases of competitive filing, if two or more applications for the same mineral lease or material permit contain identical bids and bear a time stamp showing the applications were filed at the same time, the agency will award the mineral lease or material permit by public drawing or oral auction.

3. Competitive Filing.

(a) The minimum acceptable bid for competitive filing of applications for a mineral lease or material permit shall be at least equal to the rental rate for the first year of the lease.

(b) Notices of the offering of lands for competitive filing will run for a period of not less than fifteen (15) consecutive days after the notice is posted in the agency's office.

(c) Where applicants wish to submit applications for competitive filing, such applications shall be submitted in separately sealed envelopes and marked for competitive filing.

4. Rejection.

If an application, or any part thereof, is rejected, any money tendered for rental on the rejected portion shall be refunded or credited.

5. Application Withdrawal.

(a) Should an applicant desire to withdraw his/her application, the applicant must submit a written request to the agency. If the request is received prior to the time the agency approves the application, all money tendered by the applicant, except the filing fee, shall be refunded. If the request is received after approval of the application, then, unless the applicant accepts the offered mineral lease or material permit, all money tendered is forfeited to the agency, unless otherwise approved by the director for good cause shown.

(b) Applicants desiring to withdraw an application which has been filed under the competitive filing rules above, must submit a written request to the agency. If the request is received before

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R850. School and Institutional Trust Lands, Administration.**R850-26. Coal Leases.****R850-26-100. Definitions.**

In addition to those applicable definitions in R850-24-175, the following definitions also apply to this section:

1. Lease: a lease in a coal resource as defined in R850-26-150.
2. Lessee: a person or entity holding an interest in a coal lease.

R850-26-150. Classification of Coal Resources.

"Coal" shall include black or brownish-black solid fossil fuel that has been subjected to the natural processes of coalification and which falls within the classification of coal by rank: I Anthracite, II Bituminous, III Sub-Bituminous, and IV Lignitic.

R850-26-200. Coal Leasing of Lands Acquired in Public Law 105-335 Exchange.

1. Acquired lands shall mean lands acquired by the agency pursuant to the Utah Schools and Lands Exchange Act of 1998, Public Law 105-335, 112 Stat. 3139 (1998)(the "Exchange Act").

2. Leasing of coal interests in the acquired lands shall be governed by applicable provisions of state law, the Exchange Act, that certain Memorandum of Understanding Between the Utah School and Institutional Trust Lands Administration, the United States Department of Agriculture, and the United States Department of the Interior dated January 5, 1999, as amended from time to time, and by those certain provisions of R850-24 and R850-26 not in conflict with this section.

3. The director shall have broad discretion to determine terms, conditions and procedures for leasing coal interests in the acquired lands by competitive filing, including without limitation:

- (a) the determination of rental rates;
- (b) lease forms and lease stipulations for particular tracts;
- (c) the amount of any required bid deposit;
- (d) the minimum acceptable bid for particular tracts;
- (e) terms of payment for bonus bids; and
- (f) bidding procedures generally.

4. The director may, but is not obligated to, disclose the minimum acceptable bid in advance of offering the lease by competitive filing.

5. In the event that the high bid in any competitive bid filing does not meet the minimum acceptable bid previously determined by the director, the director may, but is not obligated to, negotiate with the high bidder to obtain a negotiated bid that, in the discretion of the director, represents fair market value. Alternatively, the director may re-offer the lands for competitive filing, hold an oral auction of the lands pursuant to Subsection 53C-2-407(4), or withdraw the lands from leasing.

6. Nothing in this rule shall prevent the agency from leasing or otherwise disposing of coal interests in the acquired lands pursuant to Subsection 53C-2-401(1)(d)(ii), subject to compliance with applicable law.

R850-26-300. Coal Lease Provisions.

1. Royalty and Minimum Royalty.

- (a) The director shall establish the production royalty rate, not to be less than 8%.
- (b) The director shall establish the annual minimum royalty rate(s) at the time the lease is offered.

2. Size of Leaseable Tract.

A lease shall not be issued for a parcel less than a quarter-quarter section or surveyed lot unless approved by the director.

3. Primary Coal Lease Term.

The primary lease term for any lease may not exceed ten (10) years.

4. Continuance of Coal Lease After Expiration of Primary Term.

A lease shall be continued after the primary term has expired so long as:

- (a) coal is being produced in paying quantities from the lease or an approved mining unit; or
- (b) the agency determines that the lessee:
 - (i) is engaged in diligent operations, exploration, or development which is reasonably calculated to advance development or production of the coal resource; or
 - (ii) has made substantial financial investments for the direct purpose of advancing development or production of the coal resource; and
 - (iii) pays the annual minimum royalty set forth in the lease.

5. Readjustment of Coal Lease.

All leases shall contain a provision setting forth the agency's right to readjust the terms and provisions of the lease on a periodic basis, and such readjustment shall be made in accordance with R850-24-1000. A lease continued after expiration of its primary term shall be subject to such readjustment provision(s).

6. Other Lease Provisions.

(a) The agency may require, in addition to the lease provisions required by these rules, any other provisions to be included in the lease as it deems necessary.

R850-26-400. Existing Coal Lease Conversion.

Existing leases issued prior to the effective date of these rules and in good standing on such date shall continue for the term specified in the lease and shall be subject to the terms and provisions contained in the lease. The agency may, however, allow such lessees to convert such existing leases to the new lease, providing such conversion will not conflict with the valid existing rights of any other lessee or owner upon the same lands.

R850-26-450. Coal Exploration Permit.

The director may issue non-exclusive short-term exploration permits upon unleased trust lands for the purpose of conducting exploration drilling operations, according to the following terms:

1. Applications for a coal exploration permit shall include an application fee.
2. The application shall specify the location and number of exploratory drilling holes, and applicant shall pay a drilling fee as specified on the agency's fee schedule for each exploratory drilling hole approved by the agency.
3. Prior to commencing operations, the coal exploration permittee must obtain a coal exploration permit from UDOGM, and must provide 60 days' notice of intent to drill to the agency.
4. A bond for reclamation and drill hole plugging must be posted prior to the commencement of operations.
5. The coal exploration permittee must file a true and complete copy of all drilling logs and geological reports associated with the drilling project with the agency at the conclusion of drilling operations.

R850-26-500. Operations Notification and Plan.

1. At least 60 days prior to the commencement of any surface disturbance, drilling, mining or other operations, the lessee shall submit a plan of operations to the agency in accordance with the terms and conditions established by the agency, as set forth in R850-24-700. Under no circumstance shall the lessee/permittee commence operations without a plan of operation approved by the agency.

2. The agency shall require the lessee to meet agency reclamation requirements as set forth in R850-24-700.

KEY: coal, lease provisions, administrative procedures, plan of operation

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53C-1-302(1)(a)(ii)

53C-2-201(1)(a)

53C-2-401(1)(d)(ii)

53C-2-402(1)

53C-2-407(4)

R850. School and Institutional Trust Lands, Administration.

R850-27. Geothermal Steam.

R850-27-100. Definitions.

1. In addition to those applicable definitions in R850-24-175, the following definitions shall apply to this section:

- (a) Lease: a geothermal steam lease.
- (b) Lessee: a person or entity holding a record title interest in a geothermal steam lease.
- (c) Shut-In Geothermal Well: a geothermal well capable of producing in paying quantities, but which cannot be marketed at a reasonable price due to existing market conditions.

R850-27-200. Geothermal Steam Lease Issuance.

- 1. The agency shall issue leases competitively, non-competitively or enter into joint ventures or other business arrangements for the leasing of geothermal steam resources only on lands where the agency owns both the surface and mineral rights.
- 2. A lease shall not be issued for a parcel less than a quarter-quarter section or surveyed lot unless approved by the director.
- 3. Leases shall be limited to no more than 640 acres or one section unless approved by the director.
- 4. Any lease may be terminated by the agency in whole or part upon lessee's failure to comply with any term or condition of the lease or applicable laws and rules.

R850-27-300. Geothermal Steam Lease Provisions.

- 1. Rentals and Rental Credits.
 - (a) The director shall establish the rental rate, not less than \$1.00 per acre per year, at the time the lease is offered. The minimum annual rental on any lease shall not be less than \$40.
 - (b) Rental payments shall be paid in advance each year on or before the lease anniversary date, unless otherwise stated in the lease.
 - (c) The rental payment for a lease year shall be credited against production royalties only as they accrue for that lease year, unless otherwise provided for in the lease.
 - (d) Any overpayment of advance rental occurring from the lease applicant's incorrect listing of acreage of lands described in the application shall be credited toward the applicant's rental account.
 - (e) The agency may accept rental payments made by any party, provided however, that the acceptance of such payment(s) shall not be deemed to be recognition of any interest of the payee in the lease.
- 2. Royalty Rate.
 - (a) The director shall establish the production royalty rate, not to be less than 10%, unless otherwise established by the director, at the time the lease is offered.
- 3. Primary Geothermal Steam Lease Term.
 - (a) The director shall establish the lease primary term, not to exceed ten (10) years, at the time the lease is offered.
- 4. Continuance of a Geothermal Steam Lease After Expiration of Primary Term.
 - (a) A lease shall be continued after the primary term has expired so long as:
 - (i) the leased substance is being produced in paying quantities from the leased premises, from lands pooled, communitized, or unitized with the leased premises or from an approved drilling unit with respect to the leased premises; or
 - (b) the agency determines that the lessee:
 - (i) is engaged in operations, exploration, or development which are diligent and are reasonably calculated to advance development or production of the leased substance from the leased premises, from lands pooled, communitized, or unitized with the leased premises, or lands constituting an approved drilling unit with respect to the leased premises (diligent operations may include cessation of operations not in excess of 90 days in duration), and

(ii) pays the annual minimum royalty set forth in the lease.

5. Readjustment.

All geothermal leases shall contain a provision setting forth the agency's right to readjust the terms and provisions of the lease on a periodic basis, and such adjustment shall be made in accordance with R850-24-1000.

6. Unitization of Geothermal Leases.

(a) Lessees, upon prior written authorization of the director, may commit leased trust lands to unit, cooperative, or other plans of development with other lands.

(b) The director may, with the consent of the lessee, modify any term of a lease for lands that are committed to a unit, cooperative, or other plan of development.

(c) Production allocated to leased trust lands under the terms of a unit, cooperative, or other plan of development shall be considered produced from the leased lands whether or not the point of production is located on the leased trust lands.

(d) The term of all leases included in any cooperative or unit plan of geothermal steam development or operation in which the agency has joined, or shall hereafter join, shall be extended automatically for the term of the unit or cooperative agreement. Rentals on leases so extended shall be at the rate specified in the lease, subject to change in rates at the discretion of the director or as may be prescribed in the terms of the lease.

(e) Any lease eliminated from any cooperative or unit plan of development or operation, or any such lease which is in effect at the termination of a cooperative or unit plan of development or operation, unless relinquished, shall continue in effect for the fixed term of the lease, or for two years after its elimination from the plan or agreement or the termination thereof, whichever is longer, and so long thereafter as the leased substances are produced in paying quantities.

(f) Rentals under such leases shall continue at the rate specified in the lease.

7. Shut-In Geothermal Wells Considered to be Producing in Paying Quantities

(a) The director shall establish the minimum rental, not to be less than \$1.00 per acre per year nor more than twice the annual lease rental provided for in the lease, for a shut-in geothermal well.

(b) The director shall establish the minimum royalty, to be not less than 10% nor more than twice the annual lease rental provided for in the lease, for a shut-in geothermal well.

(c) The terms of the lease shall provide the basis upon which the minimum rental or minimum royalty is to be paid by the lessee for a shut-in geothermal well.

(d) The director may, at any time, require written verification from the lessee that a geothermal well qualifies as a shut-in geothermal well.

8. Other Lease Provisions.

The agency may require, in addition to the lease provisions required by these rules, any other provisions to be included in the lease as it deems necessary.

R850-27-400. Existing Geothermal Steam Lease Conversion.

Existing leases issued prior to the effective date of these rules and in good standing on such date shall continue for the term specified in the lease and shall be subject to the terms and provisions contained in the lease. The agency may, however, allow such lessees to convert such existing leases to the new lease, providing such conversion will not conflict with the valid existing rights of any other lessee or owner upon the same lands.

R850-27-500. Geothermal Steam Lease Application Process.

1. Applications for leases, except in the case of competitive bid filing, are received for filing in the office of the

agency during office hours. Except as provided, all the applications received by personal delivery over the counter, shall be immediately stamped with the exact date and time of filing. All applications presented for filing at the opening of the office for business on any business day shall be stamped received as of 8 a.m. on that day. All applications received in the first delivery of the U.S. Mail of each business day shall be stamped received as of 8 a.m. on that day. The time indicated on the time stamp is deemed the time of filing unless the agency determines that the application is materially deficient in any particular or particulars. If an application is determined to be deficient, it will be returned to the applicant.

2. Except in cases of competitive bid filing, if two or more applications for the same lease contain identical bids and bear a time stamp showing the applications were filed at the same time, the agency will award the lease by public drawing or oral bidding.

3. **Competitive Bid Filing.**

(a) The minimum acceptable bid for competitive bid filing of applications for a lease shall be at least equal to the rental rate for the first year of the lease.

(b) Notices of the offering of lands for competitive bid filing will run for a period of not less than fifteen (15) consecutive days after the notice is posted in the agency's office.

(c) Where applicants wish to submit applications for competitive bid, such applications shall be submitted in separately sealed envelopes and marked for competitive bid filing.

4. If an application or any part thereof is rejected, any money tendered for rental for the rejected portion shall be refunded or credited.

5. **Application Withdrawal.**

(a) Should an applicant desire to withdraw his application, the applicant must submit a written request to the agency. If the request is received prior to the time the agency approves the application, all money tendered by the applicant, except the filing fee, shall be refunded. If the request is received after approval of the application, then, unless the applicant accepts the offered lease, all money tendered is forfeited to the agency, unless otherwise approved by the director, for good cause shown.

(b) Applicants desiring to withdraw an application which has been filed under the competitive bid filing rules above, must submit a written request to the agency. If the request is received before sealed bids for rental have been opened, all money tendered by the applicant, except the filing fee, shall be refunded. If the request is received after sealed bids for rental have been opened, and if the applicant is awarded the bid, then unless the applicant accepts the offered lease, all money tendered shall be forfeited to the agency, unless otherwise approved by the director for good cause shown.

R850-27-600. Operations Notification and Plan.

1. At least 60 days prior to the commencement of any surface disturbance, drilling, or other operations, lessee shall submit a plan of operations to the agency in accordance with the terms and conditions required by the agency, as set forth in R850-24-700. Under no circumstance shall the lessee commence operations without a plan of operation approved by the agency.

2. The agency shall require the lessee to meet agency reclamation requirements as set forth in R850-24-700.

KEY: geothermal steam, lease provisions, administrative procedures, plan of operations

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53C-1-302(1)(a)(ii)

53C-2-201(1)(a)

53C-2-402(1)

R916. Transportation, Operations, Construction.

R916-3. Design-Build Contracts.

R916-3-1. Purpose.

(1) This rule is to provide guidance under which the Utah Department of Transportation (UDOT) may use the Design-Build approach to contracting pursuant to Section 63G-6a-1402(3)(a). Design-Build seeks to provide a project delivery method which may result in: a savings of time, cost, and administrative burden; improved quality expectations as to the end product, schedule, and budget; and risk management savings due to lack of duplication of expenses and improved coordination of efforts.

R916-3-2. Authority.

(1) The provisions of this rule are authorized by the following grants of rulemaking authority and provisions of Utah Code: Subsection 63G-6a-1402(3)(a), Title 63G, Chapter 3; and Sections 72-1-201 and 72-2-206 of the Utah Transportation Code.

R916-3-3. Policy.

(1) UDOT may use, where determined appropriate by the Executive Director, or designee, the Design-Build method of project delivery. When Design-Build is used, UDOT shall enter into a contract with a single entity to provide both engineering/design services, construction services, and/or maintenance services pursuant to a UDOT provided scope of work statement. Design-Build is not recommended for every project. The use of the Design-Build method may be determined by the individual needs and merits of the project.

R916-3-4. Pre-qualification.

(1) UDOT may issue a Request for Qualifications (RFQ), soliciting qualification statements from contractors wishing to submit proposals on a UDOT Design-Build project. The RFQ shall state the minimum and maximum number of highly qualified proposers that will be invited to submit final proposals.

(2) Pre-qualification shall be based on an evaluation of the criteria set forth in the RFQ, including construction experience; design experience; technical competence; capability to perform, including financial, manpower and equipment resources; experience in other Design-Build projects; and past performance.

(3) The field of competing proposers shall be narrowed to the most qualified proposers, not to exceed the number designated in the RFQ. Failure to achieve at least two qualified proposers shall necessitate re-soliciting the project.

R916-3-5. Preparation of Specifications.

(1) UDOT may use any method of specifying construction items the Executive Director determines to be in the best interest of UDOT. Engineering firms who participate in the preparation of specifications or other information used in a procurement may not participate as proposers on such projects if a conflict of interest exists as determined by UDOT.

R916-3-6. Request for Proposals (RFP).

(1) Pre-qualified proposers shall be invited to submit proposals on designated Design-Build project pursuant to an RFP. UDOT may elect to ask for initial proposals followed by discussions and may request best and final offers, or may elect to award the contract without discussions or requesting best and final offers. The RFP may ask for proposals based on a predetermined sum.

(2) UDOT may award a predetermined fee to the proposers who submit responsive proposals but who are not selected for contract award. The amount of the fee (if any) shall be identified in the RFP.

(3) The RFP shall require separate technical and price proposals, meeting requirements as stated in the RFP. The RFP may require proposals to meet a mandatory technical level, and may include a provision for submitting alternative technical concepts.

(4) Technical solutions/design concepts contained in proposals shall be considered proprietary information unless a predetermined fee is accepted.

R916-3-7. Evaluation of Proposals and Discussions with Proposers.

(1) UDOT shall evaluate the technical and price proposals separately, in accordance with the evaluation criteria set forth in the RFP.

(2) UDOT may offer the proposers the opportunity to participate in presentations and/or discussions regarding their proposals. Discussions, either oral or in writing, may be held with proposers for the purpose of clarification of the proposals and/or to identify deficiencies in initial proposals. If presentations or discussions are held with one proposer, they must be held with all pre-qualified proposers.

(3) If discussions are held, best and final offers will be requested. If best and final offers are requested they will be the basis for award and will be evaluated as stated in the RFP.

(4) UDOT may follow any of the criteria included in 23 CFR 636 Subpart E when conducting discussions with proposers, which is incorporated as part of this Rule R916-3-7.

R916-3-8. Acceptable Bid Security; Performance and Payment Bonds.

(1) The Executive Director, or designee, shall have authority to waive the requirement to provide bid security, or may reduce the amount of such security, if he or she determines that the bid security otherwise required by Part 11 of the Utah Procurement Code to be unnecessary to protect the State.

(2) The Executive Director, or designee, shall have authority to reduce the amount of the payment and performance bonds below the 100% level required by Part 11 of the Utah Procurement Code if he or she determines that a 100% bond is unnecessary to protect the State.

(3) Bid security, payment bonds and performance bonds must be provided on the forms included in the RFP.

R916-3-9. Required Contract Clauses.

The Design-Build contract documents shall include the contract clauses set forth in Utah Administrative Code R23-1-60, subject to such modifications as the Executive Director deems advisable. Any modifications shall be supported by a written determination of the Executive Director that describes the circumstances justifying the variations, and notice of any material variation shall be included in the RFP.

R916-3-10. Award and Contract.

(1) The basis for award shall be stated in the RFP. Award may be based on any of the following approaches, all of which shall be deemed to constitute award to the responsive and responsible offeror whose proposal is most advantageous to UDOT as such terms are used in Utah Code Section 63G-6a-1402:

(a) Award to the responsible proposer offering the lowest priced responsive proposal. If the RFP includes a mandatory technical level, no proposal shall be considered responsive unless it meets that level.

(b) Award to the responsible proposer whose proposal is evaluated as providing the best value to UDOT.

(c) If the RFP provides for a stipulated sum, award to the responsible proposer whose proposal is evaluated as providing the best value to UDOT.

(2) There is no requirement that a contract be awarded. Following award, a contract shall be executed and notice given to the successful Design-Build proposer to proceed with the work.

KEY: construction, contracts, highways

March 27, 2015

63G-6a-1402

Notice of Continuation August 11, 2011

R916. Transportation, Operations, Construction.**R916-4. Construction Manager/General Contractor Contracts.****R916-4-1. Purpose.**

(1) Pursuant to Utah Code Section 63G-6a-106(3)(a), this rule establishes the Department's procedures to procure transportation construction under the Construction Manager/General Contractor (CM/GC) approach authorized in Utah Code Section 63G-6a-1302. CM/GC contracting seeks to provide a collaborative project delivery method which may result in: A savings of time and cost; improved quality expectations as to the end product, schedule, and budget; and risk management savings through lack of duplication of expenses, and through early, continuous and coordinated efforts.

R916-4-2. Authority.

(1) This rule is authorized by grants of rulemaking authority in Sections 63G-6a-106(3)(a) and 63G-6a-1302 of the Utah Procurement Code; Title 63G, Chapter 3, Utah Administrative Rulemaking Act; and Sections 72-1-201(h), 72-2-206, and 72-6-105 of the Utah Transportation Code.

R916-4-3. Policy.

(1) When the Executive Director or designee determines it appropriate, Department may use CM/GC method of project delivery. CM/GC is not recommended for every project, therefore, the decision to use the method must take into account the factors listed in Utah Code Subsection 63G-6a-1302(3).

R916-4-4. Request for Proposals (RFP).

(1) The Department will issue a request for proposals (RFP) from interested contractors.

(2) The RFP may require separate technical and price proposals, meeting requirements as stated in the RFP.

(3) The RFP may require a minimum mandatory technical level.

R916-4-5. Evaluation Team.

(1) The Department shall establish a team for evaluating the technical proposals consisting of no fewer than 5 members.

(2) One member of the team may be an employee of a consulting engineering firm, selected based on recommendation from the American Council of Engineering Companies of Utah (ACEC); and

(3) One member may be an employee of a licensed contractor, selected based on recommendation from the Utah Chapter of the Association of General Contractors (AGC).

R916-4-6. Evaluation of Proposals and Discussions with Proposers.

(1) The Department shall evaluate proposals, in accordance with the evaluation criteria set forth in the RFP.

(2) As part of the qualifications specified in the RFP, the Department may require that potential contractors, at a minimum, demonstrate their:

- (a) Construction experience with similar projects;
 - (b) financial, manpower and equipment resources available for the project;
 - (c) experience with other negotiated contracts; and
 - (d) preconstruction or design support experience.
- (3) The Department may require potential contractors to participate in formal interviews as part of the selection process.

R916-4-7. Acceptable Bid Security; Performance and Payment Bonds.

(1) The Executive Director or designee shall have the authority to waive the requirement to provide bid security, or may reduce the amount of such security, if he or she determines that the

bid security otherwise required by Part 11 of the Utah Procurement Code to be unnecessary to protect the State.

(2) The Executive Director or designee may reduce the amount of the payment and performance bonds below the 100% level required by Part 11 of the Utah Procurement Code, if he or she determines that a 100% bond is unnecessary to protect the State.

(3) Bid security, payment bonds and performance bonds must be provided on the forms included in the RFP.

R916-4-8. Required Contract Clauses.

The CM/GC contract documents shall include the contract clauses set forth in Utah Administrative Code Rule R23-1-60, subject to such modifications as the Executive Director or designee believes appropriate. Any modifications shall be supported by a written determination of the Executive Director or designee that describes the circumstances justifying the variations, and notice of any material variation shall be included in the RFP.

R916-4-9. Selection.

The basis for selection shall be stated in the RFP. Selection may be based on any of the following approaches.

(1) By the responsible proposer offering the lowest priced responsive proposal. If the RFP includes a mandatory technical level, no proposal shall be considered responsive unless it meets that level;

(2) By the responsible proposer whose proposal is evaluated as providing the best value to Department;

(3) By the responsible proposer whose proposal is evaluated as representing the most qualified proposer; or

(4) Other approaches as determined by the Executive Director or designee, which satisfy the requirements of the Utah Procurement Code.

R916-4-10. Award of Contracts.

(1) The CM/GC approach consists of the following two contract phases:

(a) Preconstruction or design services, which may include value engineering, cost estimating, conceptual estimating, constructability reviews, scheduling, and Maintenance of Traffic plans.

(b) Construction services, which will be awarded after the plans have been sufficiently developed and a price for construction services has been successfully validated and accepted. In the event that a price is not validated and accepted, the Department shall not award the construction phase of the contract. Incremental construction contracts may be awarded after prices are validated and accepted for each contract.

(2) The Department shall not be required to award a contract during either of the contract phases. However, following an award, the Department shall provide notice of the award to the successful CM/GC proposer followed by a notice to proceed with the work.

KEY: transportation, highways, contracts, construction
March 27, 2015 63G-6a-1302
Notice of Continuation March 11, 2010 63G-6a-106(3)(a)
72-1-201

R990. Workforce Services, Housing and Community Development.

R990-8. Permanent Community Impact Fund Board Review and Approval of Applications for Funding Assistance.

R990-8-1. Purpose.

The Permanent Community Impact Fund Board (the Board) provides loans and/or grants to State agencies and subdivisions of the State which are or may be socially or economically impacted, directly or indirectly, by mineral resource development. Authorization for the Board is contained in Section 35A-8-301 et seq.

R990-8-2. Eligibility.

Only those applications for funding assistance which are submitted by an eligible applicant for an eligible project shall be funded by the Board.

Eligible projects include: a) planning; b) the construction and maintenance of public facilities; and c) the provision of public services. "Public Facilities and Services" means public infrastructure or services traditionally provided by local governmental entities.

Eligible applicants include state agencies and subdivisions of the state and Interlocal agencies as defined in Subsection 35A-8-302, which are or may be socially or economically impacted, directly or indirectly, by mineral resource development.

R990-8-3. Application Requirements.

A. Applicants shall submit their funding requests on the Board's most current application form, furnished by the Housing and Community Development Division (HCD). Applicants submitting incomplete applications will be notified of deficiencies and their request for funding assistance will be held by the Board's staff pending submission of the required information by the applicant.

Complete applications which have been accepted for processing will be placed one of the Trimester's upcoming "Application Review Meeting" agendas.

B. Additional general information not specifically covered by the application form should also be furnished to the Board and its staff when such information would be helpful to the Board in appraising the merits of the project.

C. For proposed drinking water and sewer projects, sufficient technical information must be provided to the Utah Department of Environmental Quality (DEQ) to permit their review. The Board will not act on any drinking water or sewer project unless they receive such review from DEQ.

D. Planning grants and studies normally require a fifty percent cash contribution by the applicant. Planning assistance requests shall be reviewed and/or provided by the Rural Planning Group.

E. The Board requires all applicants to have a vigorous public participation effort. All applicants shall hold at least one formal public hearing to solicit comment concerning the size, scope and nature of any funding request prior to its submission to the Board. In that public hearing, the public shall be advised the financing may be in the form of a loan, even if the application requests a grant.

Complete and detailed information shall be given to the public regarding the proposed project and its financing. The information shall include the expected financial impact including potential repayment terms and the costs to the public as user fees, special assessments, or property taxes if the financing is in the form of a loan. The Board may require additional public hearings if determines the applicant did not adequately disclose to the public the impact of the financial assistance during the initial public hearing.

When the Board offers the applicant a financial package that is substantially different in the amounts, terms or conditions initially requested by an applicant, the Board may require additional

public hearings to solicit public comment on the modified funding package.

A copy of the public notice and transcript or minutes of the hearing shall be attached to the funding request. Public opinion polls may be submitted in addition to the transcript or minutes.

F. Letters of comment outlining specific benefits (or problems) to the community and State may be submitted with the application.

G. All applicants are required to notify in writing the applicable Association of Governments of their intention to submit a funding request to the Board. A copy of any comments made by the Association of Governments shall be attached to the funding request. It is the intent of the Board to encourage regional review and prioritization of funding requests to help ensure the timely consideration of all worthwhile projects.

H. Section 9-8-404 requires all state agencies before they expend any state funds or approves any undertaking to take into account the effect of the undertaking on any district, site, building structure or specimen that is included in or eligible for inclusion in the National Register of Historic Places or the State Register and to allow the state historic preservation officer (SHPO) a reasonable opportunity to comment on the undertaking or expenditure. In order to comply with that duty, the Board requires all applicants provide the Board's staff with a detailed description of the proposed project attached to the application. The Board's staff will provide SHPO with descriptions of applications which may have potential historic preservation concerns for SHPO's review and comment in compliance with the CIB/SHPO Programmatic Agreement. SHPO comments on individual applications will be provided to the Board as part of the review process outline in R990-8-4. Additionally the Board requires that if during the construction of the project the applicant discovers any cultural/paleontological resources, the applicant shall cease project activities which may affect or impact the cultural/paleontological resource, notify the Board and SHPO of the discovery, allow the Board to take into account the effects of the project on cultural/paleontological resources, and not proceed until further approval is given by the Board.

I. All applicants must provide evidence and arguments to the Board as to how the proposed funding assistance provides for planning, the construction and maintenance of public facilities or the provision of public services.

J. All applicants must demonstrate that the facilities or services provided will be available and open to the general public and that the proposed funding assistance is not merely a device to pass along low interest government financing to the private sector.

K. All applicants must demonstrate that any arrangement with a lessee of the proposed project will constitute a true lease, and not a disguised financing arrangement. The lessee must be required to pay a reasonable market rental for the use of the facility. In addition, the applicant shall have no arrangement with the lessee to sell the facility to the lessee, unless fair market value is received.

L. Each applicant must submit evidence and legal opinion that it has the authority to construct, own and lease the proposed project. In the case of a request for an interest bearing loan, the applicant must provide an opinion of nationally-recognized bond counsel that the interest will not be subject to federal income taxes.

M. All applicants shall certify to the Board that they will comply with the provisions of Titles VI and VII of the Civil Rights Act of 1964 (42 USC 2000e), as amended, which prohibits discrimination against any employee or applicant for employment or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agree to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90, as amended, which prohibits discrimination on the basis of age; Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 and 28 CFR 35, as amended, which prohibit discrimination on the basis of disabilities; Utah Anti-Discrimination Act, Section 34A-5-101 et seq., which

prohibits discrimination against any employee or applicant for employment because of race, color, sex, age, religion, national origin, or handicap, and to certify compliance with the ADA to the Board on an annual basis and upon completion of the project.

R990-8-4. Board Review Procedures.

A. The Board will review applications and authorize funding assistance on a "Trimester" basis. The initial meetings of each "Trimester" are "Project Review Meetings". The final meeting of each "Trimester" is the "Project Funding Meeting". Board meetings shall be held monthly on the 1st Thursday of each month, unless rescheduled or cancelled by the chairman or by formal motion of the board. The Trimesters shall be as follows:

1. 1st Trimester: application deadline, June 1st; Project Review Meetings, July, August, September; Project Funding Meeting October.

2. 2nd Trimester: application deadline, October 1st; Project Review Meetings, November, December, January; Project Funding Meeting, February.

3. 3rd Trimester: application deadline, February 1st; Project Review Meetings, March April, May; Project Funding Meeting, June.

B. The process for review of new applications for funding assistance shall be as follows:

1. Submission of an application, on or before the applicable deadline to the Board's staff for technical review and analysis.

2. Incomplete applications will be held by the Board's staff pending submission of required information.

3. Complete applications accepted for processing will be placed on one of the Trimester's upcoming "Project Review Meeting" agendas.

4. At the "Project Review Meeting" the Board may either:

- a. deny the application;
- b. place the application on the "Pending List" for consideration at a future "Project Review Meeting" after additional review, options analysis and funding coordination by the applicant and the Board's staff;
- c. place the application on the "Priority List" for consideration at the next "Project Funding Meeting".

C. Applicants and their representatives shall be informed of any "Project Review Meeting" at which their applications will be considered. Applicants shall make formal presentations to the Board and respond to the Board's questions during the "Project Review Meetings". If an applicant or its representatives are not present to make a presentation, the board may either:

1. deny the application;
2. place the application on the "Pending List" for consideration at a future "Project Review Meeting".

D. No funds shall be committed by the Board at the "Project Review Meetings", with the exception of circumstances described in Subsection F.

E. Applications for funding assistance which have been placed on the "Priority List" will be considered at the "Project Funding Meeting" for that Trimester. At the "Project Funding Meeting" the Board may either:

1. deny the application;
2. place the application on the "Pending List" for consideration at a future "Project Review Meeting".

3. authorize funding the application in the amount and terms as determined by the Board.

F. In instances of bona fide public safety or health emergencies or for other compelling reasons, the Board may suspend the provisions of this section and accept, process, review and authorize funding of an application on an expedited basis.

R990-8-5. Local Capital Improvement Lists.

A. A consolidated list of the anticipated capital needs for eligible entities shall be submitted from each county area, or in the case of state agencies, from HCD. This list shall be produced as a cooperative venture of all the eligible entities within each county area.

B. The list shall contain a short term (one year) and a medium term (five year) component.

C. The list shall contain the following items: jurisdiction, summary description, project time frame, anticipated time of submission to the Board, projected overall cost of project, anticipated funding sources, the individual applicant's priority for their own projects, and the county area priority for each project. The county area priority for each project shall be developed as a cooperative venture of all eligible entities within a county area.

D. Projects not identified in a county area's or HCD's list, will not be funded by the Board, unless they address a bona fide public safety or health emergency or for other compelling reasons.

E. An up-dated list shall be submitted to the Board no later than April 1st of each year. The up-dated list shall be submitted in the uniform format required by the Board.

F. If the consolidated list from a county area does not contain the information required in R990-8-5-C, or is not in the uniform format required in R990-8-5-E, all applications from the affected county area will be held by the Board's staff until a future Trimester pending submission of the required information in the uniform format.

G. The Board has authorized its staff to hold any application that does not appear on the applicable local capital improvement list. Such applications will be held until a future Trimester to allow the applicant time to pursue amending the local capital improvement list.

H. The amendment to include an additional project must follow the process used for the original list, and it must contain the required information and be submitted in the uniform format, particularly the applicant and county area prioritization.

I. The regional Association of Governments are the compilers of the capital improvement lists. The AOG cannot simply add additional applications to any given list without the applicant meeting the process requirements outlined in Subsection C.

J. Notwithstanding Subsection I, allowing an applicant to add a project to the capital improvement list just prior to the application deadline subverts the intent of the capital improvement list process. Such applications will be held by the Board's staff until the next Trimester.

R990-8-6. Modification or Alteration of Approved Projects.

A recipient of PCIFB grant funds may not, for a period of ten years from the approval of funding by the Board, change or alter the use, intended use, ownership or scope of a project without the prior approval of the Board. A recipient of PCIFB loan funds may not, for the term of the loan, change or alter the use, intended use, ownership or scope of a project without the prior approval of the Board. The recipient shall submit a written request for such approval and provide such information as requested by the Board or its staff, including at a minimum a description of the modified project sufficient for the Board to determine whether the modified project is an eligible use of PCIFB funds.

The Board may place such conditions on the proposed modifications or modified project as it deems appropriate, including but not limited to modifying or changing the financial terms, requiring additional project actions or participants, or requiring purchase or other satisfaction of all or a portion of the Board's interests in the approved project. Approval shall only be granted if the modified project, use or ownership is also an eligible use of PCIFB funds, unless the recipient purchases or otherwise satisfies in full the Board's interest in the previously approved or the proposed project.

R990-8-7. Procedures for Electronic Meetings.

A. These provisions govern any meeting at which one or more members of the Board or one or more applicant agencies appear telephonically or electronically pursuant to Section 52-4-7.8.

B. If one or more members of the Board or one or more applicant agencies may participate electronically or telephonically, public notices of the meeting shall so indicate. In addition, the notice shall specify the anchor location where the members of the CIB not participating electronically or telephonically will be meeting and where interested persons and the public may attend, monitor, and participate in the open portions of the meeting.

C. Notice of the meeting and the agenda shall be posted at the anchor location. Written or electronic notice shall also be provided to at least one newspaper of general circulation within the state and to a local media correspondent. These notices shall be provided at least 24 hours before the meetings.

D. Notice of the possibility of an electronic meeting shall be given to the members of the Board and applicant agencies at least 24 hours before the meeting. In addition, the notice shall describe how the members of the Board and applicant agencies may participate in the meeting electronically or telephonically.

E. When notice is given of the possibility of a member of the Board appearing electronically or telephonically, any member of the Board may do so and shall be counted as present for purposes of a quorum and may fully participate and vote on any matter coming before the Board. At the commencement of the meeting, or at such time as any member of the Board initially appears electronically or telephonically, the Chair shall identify for the record all those who are appearing telephonically or electronically. Votes by members of the Board who are not at the physical location of the meeting shall be confirmed by the Chair.

F. The anchor location shall be designated in the notice. The anchor location is the physical location from which the electronic meeting originates or from which the participants are connected. In addition, the anchor location has space and facilities so that interested persons and the public may attend, monitor, and participate in the open portions of the meeting.

R990-8-8. Major Infrastructure Set Aside Fund.**A. Creation of Fund**

1. There is hereby created within the Permanent Community Impact Fund the Major Infrastructure Set Aside Fund.

2. The Purpose of this Fund is to allow the Board to participate and fund major transportation and other significant infrastructure studies and projects where the Board participation may exceed five million dollars (\$5,000,000).

B. Transfer of Monies to the Fund

1. At each funding meeting, after action is taken on all projects on the prioritization list, the Board shall consider whether to transfer any money in the Permanent Community Impact Fund to the Major Infrastructure Set Aside Fund. The Board may transfer such amounts as it deems appropriate, in its discretion, based on motion and a majority vote of the Board.

2. When money is transferred to the Major Infrastructure Set Aside Fund the Board shall identify whether the money being transferred is Bonus or Mineral Lease money. The status of the money as Bonus monies or Mineral Lease monies shall continue while the monies are in the Major Infrastructure Set Aside Fund and may only be granted or loaned in accordance with that status.

3. The Division shall maintain an accounting of the funds in the Major Infrastructure Set Aside Fund as bonus funds or mineral lease funds and shall separately identify the status of the money in the Major Infrastructure Set Aside Fund in its briefings to the Board.

C. Use of the Fund

1. Money in the Major Infrastructure Set Aside Fund may only be used to fund major transportation and other significant infrastructure studies and projects. These projects would include pipelines, roadways, rail lines, and other major infrastructure activities where the cost may exceed five million dollars

(\$5,000,000) and where the project is within the purposes for the creation and use of the Fund. The Board, on motion and majority vote, shall designate and allow the use of the money from the Fund, specifying whether the money comes from the Bonus or Mineral Lease monies in the Fund.

2. Repayment on any loans from the Major Infrastructure Set Aside Fund shall be credited to and placed in the Major Infrastructure Set Aside Fund. Payments on Bonus money loans shall maintain their status as Bonus monies. The Division shall maintain a separate accounting of all loan payments in the Major Infrastructure Set Aside Fund.

D. Reconversion of Monies from the Fund

1. The Board may, at any time on motion and majority vote, reconvert and transfer funds from the Major Infrastructure Set Aside Fund back to the general Permanent Community Impact Fund. The motion and action of the Board shall specify if the money being transferred back to the general Permanent Community Impact Fund is Bonus or Mineral Lease money, and that status of the money shall continue in the general Permanent Community Impact Fund.

KEY: grants
March 10, 2015

35A-8-305(1)(a), (b), and (c)
35A-8-306
35A-8-307(1)(a)

R994. Workforce Services, Unemployment Insurance.**R994-204. Covered Employment.****R994-204-201. Localization of Services.**

Employment is covered under the Act if all of a worker's service is performed within Utah. Workers who perform services for one employer in more than one state are covered in Utah under certain circumstances.

(1) Service Localized in this State.

The service is considered to be localized in Utah if it is performed entirely within Utah. The service is also considered to be localized in Utah if performed both inside and outside of Utah, but the service outside of Utah consists of isolated transactions or is otherwise incidental or transitory to the service in Utah. Some of the factors which might indicate that the service is incidental or transitory are:

- (a) the employer and the worker intend the service outside of Utah to be an isolated transaction, and not a regular part of the worker's duties;
- (b) the worker intends to return to Utah upon completion of the work assignment, rather than move to the other state;
- (c) the service performed outside the state is different in nature from the service performed within Utah;
- (d) it is anticipated that the worker will be performing services outside the state for 12 months or less however this length of time is intended only as a yardstick and other variables, such as the terms of the contract of hire, whether written or oral, will be considered.

(2) Service Is Not Localized in Any State But Some Service is Performed in Utah.

If the service is not localized in any state but some of the service is performed by the worker in Utah, the entire service is covered in Utah if one of the following conditions apply:

(a) The Base of Operations is in Utah.

The worker's base of operations is in Utah. The "base of operations" is the place from which the worker starts work and to which he or she customarily returns for instructions from the employer, communications from customers, to replenish stocks or materials, to repair equipment or to perform any other function necessary in the trade or profession. The base of operations may be the worker's business office, which may be located at his or her residence, or the contract of employment may specify a particular place at which the worker is to receive direction and instructions.

(b) The Place from Where Service is Controlled or Directed is in Utah.

If the worker has no base of operations or does not perform any service in the state in which the base of operations is located, it is necessary to determine if any service is performed in the state from which the service is controlled or directed. The place from which the service is controlled or directed is the place at which the basic authority exists rather than the place at which a manager or foreman supervises the service.

(c) The Place of Residence is in Utah.

If the conditions in paragraphs (a) or (b) of this subsection do not apply, it is necessary to apply the test of residence. Under this test, the service is covered in Utah if the worker lives in Utah and performs some of his or her services in Utah.

(3) Service Is Not Localized in Any State and No Service is Performed in Utah.

If the service is not localized in any state and none of the service is performed by the worker in Utah, the entire service is covered in Utah if one of the following conditions apply:

(a) The Base of Operations is in Utah.

The worker's base of operations is in Utah. The "base of operations" is the place from which the worker starts work and customarily returns for instructions from the employer, to replenish stocks or materials, to repair equipment or to perform any other function necessary in the worker's trade or profession. The base of operations may be the worker's business office, which may be located at his or her residence, or the contract of employment may

specify a particular place at which the worker is to receive his or her direction and instructions.

(b) The Place from Where the Service is Controlled or Directed is in Utah.

If the worker has no base of operations or does not perform any service in the state in which the base of operations is located, it is necessary to determine if the worker is controlled and directed from Utah. The place from which the service is controlled or directed is the place at which the basic authority exists rather than the place at which a manager or foreman supervises the service.

(4) Reciprocal Coverage.

If after applying all of the above tests to a given set of circumstances, the worker's service is found not to be subject to any one state, the employer may elect to cover all of the worker's service in one state. This election must be made under the provisions for reciprocal coverage arrangements found in Section 35A-4-106. The Department will approve reciprocal coverage and allow an employer to cover a worker's entire service in Utah if:

- (a) the employer petitions for coverage;
- (b) part of the worker's service is in Utah, the worker lives in Utah, or the worker maintains a place of business in Utah; and
- (c) the other state or states approve the election

R994-204-202. Outside Commissioned Salespersons in Covered Employment.

Outside commissioned salespersons are excluded from the Act under the outside commissioned salesperson exclusion contained in Section 35A-4-205(1)(p) unless all of the following "traveling or city salesperson" conditions apply:

(1) The Salesperson is Engaged on a Full-Time Basis.

Full-time under this section means the salesperson devotes at least 80% of his or her working time in any quarter to the solicitation of orders for one employer. This is true even if the salesperson works for the employer less than 40 hours per week. For example, a salesperson who works only 20 hours a week and spends 80 percent or more of that time working for one principal is engaged on a full-time basis.

(2) The Salesperson Solicits Orders From Wholesalers, Retailers, Contractors or Operators of Hotels and Restaurants.

The salesperson must solicit orders from certain types of customers. Generally, the following types of customers are not included: manufacturers, schools, hospitals, churches, institutions, municipalities and state and federal governments. However, a clearly identifiable and separate business carried on through such a customer, such as a bookstore or gift shop would be included as a "retailer." The salesperson must solicit orders from the following types of customers:

(a) Wholesalers who buy merchandise in comparatively large quantities and sell such merchandise in smaller quantities to jobbers and retailers for the purpose of resale.

(b) Retailers who sell merchandise to the ultimate consumers.

(c) Contractors who, for a fixed price, undertake the performance of work on an independent basis, such as construction contractors and certain service organizations. These include, among others, electrical, plumbing, painting, building, window washing and delivery service contractors.

(d) Operators of hotels, restaurants or other similar establishments. The phrase "other similar establishments" refers solely to establishments similar to hotels and restaurants and usually is limited to establishments whose primary function is the furnishing of food, lodging, or both food and lodging.

(3) The Salesperson Takes Orders for Merchandise for Resale or Supplies Used in Business.

(a) Merchandise for resale includes goods, wares and commodities that ordinarily are the objects of trade and commerce and that are purchased for resale. This term refers specifically to

tangible materials that do not lose their identities between the time of purchase and the time of resale.

(b) Supplies for use in the customer's business operations means articles consumed in conducting or promoting the customers' businesses. Generally the term "supplies" includes all tangible items that are not "merchandise for resale" or capital items. Services such as radio time and advertising space, are intangible items and not within the definition. However, calendars, advertising novelties, etc., used by the advertiser in his business constitute "supplies."

(4) The contract of service contemplates that substantially all of the services are to be performed personally by the worker. This means that the services to which the contract relates will not be delegated to any other person by the worker who undertakes under the contract to perform such services; and

(5) The worker does not have a substantial investment in facilities used in connection with the performance of his or her services. The facilities include equipment and premises available for the work but does not include such tools and equipment or clothing as are commonly provided by employees; and

(6) The services are part of a continuing relationship with the person for whom the services are performed.

R994-204-203. Domestic Service Included in Covered Employment.

Subsection 35A-4-204(2)(k) defines when domestic services, that are exempt under Subsection 35A-4-205(1)(d), become covered employment.

(1) \$1000 in a Calendar Quarter.

Domestic services performed in a private home, local college club or local chapter of a college fraternity or sorority are exempt unless the employer pays cash remuneration of \$1000 or more in one or more calendar quarter in the current calendar year or the preceding calendar year. Cash wages include wages paid by cash, check, or money order. Cash wages do not include the value of food, lodging, clothing, and other non-cash items. However, cash given to an employee in lieu of these items is considered to be cash wages.

(2) Services That Are Domestic Services.

Domestic services include services of a household nature in or about any of the places listed in subsection (1) of this section. Domestic services include work done by:

- (a) baby-sitters
- (b) cleaning people
- (c) drivers
- (d) housekeepers
- (e) nannies
- (f) health aids
- (g) maids
- (h) caretakers
- (i) yard workers
- (j) cooks
- (k) butlers

(3) Services That are Not Domestic Services.

Services that are not of a household nature such as secretarial services performed in a private home or services related to remodeling or building a private home, local college club or local chapter of a college fraternity or sorority are not domestic services.

(4) Private Home.

A private home is a fixed place of abode of an individual or family. This may include a dwelling unit in an apartment building or hotel.

(5) Local College Club or Local Chapter of a College Fraternity or Sorority Does Not Include an Alumni Club or Chapter.

(6) All Remuneration is Reportable.

Once the \$1000 cash threshold is met, all payments including cash and non-cash payments are reportable as wages.

R994-204-301. Independent Contractor Services.

(1) An independent contractor is a worker who is customarily engaged in an independently established trade, occupation, profession, or business of the same nature as the services performed, and the individual providing the services must be free from the employer's control and direction while performing services for the employer. A worker must clearly establish his or her status as an independent contractor by taking steps that demonstrate independence indicating an informed business decision has been made.

(2) Payments to or through another entity for personal services performed by a worker is exempt from employment if the personal services meet the provisions of Subsection 35A-4-204(3).

R994-204-302. Independent Contractor Determination.

(1) The Department will determine the status of a worker based upon information provided by the employer, the worker, and any other available source.

(2) If a worker files a claim for benefits and the Department, as the result of an audit, investigation, or declaratory ruling, has made a determination that the worker is an independent contractor and his or her services for an employer are exempt from coverage, any earnings from those services for that employer will be excluded from the claimant's monetary determination. The claimant may protest the monetary determination by filing an appeal as provided in Section R994-204-402.

R994-204-303. Factors for Determining Independent Contractor Status.

Services will be excluded under Section 35A-4-204 if the service meets the requirements of this rule. Special scrutiny of the facts is required to assure that the form of a service relationship does not obscure its substance, that is, whether the worker is independently established in a like trade, occupation, profession or business and is free from control and direction. The factors listed in Subsections R994-204-303(1)(b) and R994-204-303(2)(b) of this section are intended only as aids in the analysis of the facts of each case. The degree of importance of each factor varies depending on the service and the factual context in which it is performed. Additionally, some factors do not apply to certain services and, therefore, should not be considered.

(1) Independently Established.

(a) An individual will be considered customarily engaged in an independently established trade, occupation, profession, or business if the individual is, at the time the service is performed, regularly engaged in a trade, occupation, profession, or business of the same nature as the service performed, and the trade, occupation, profession, or business is established independently of the alleged employer. In other words, an independently established trade, occupation, profession, or business is created and exists apart from a relationship with a particular employer and does not depend on a relationship with any one employer for its continued existence.

(b) The following factors, if applicable, will determine whether a worker is customarily engaged in an independently established trade or business:

(i) Separate Place of Business. The worker has a place of business separate from that of the employer.

(ii) Tools and Equipment. The worker has a substantial investment in the tools, equipment, or facilities customarily required to perform the services. However, "tools of the trade" used by certain trades or crafts do not necessarily demonstrate independence.

(iii) Other Clients. The worker regularly performs services of the same nature for other customers or clients and is not required to work exclusively for one employer.

(iv) Profit or Loss. The worker can realize a profit or risks a loss from expenses and debts incurred through an independently established business activity.

(v) Advertising. The worker advertises services in telephone directories, newspapers, magazines, the Internet, or by other methods clearly demonstrating an effort to generate business.

(vi) Licenses. The worker has obtained any required and customary business, trade, or professional licenses.

(vii) Business Records and Tax Forms. The worker maintains records or documents that validate expenses, business asset valuation or income earned so he or she may file self-employment and other business tax forms with the Internal Revenue Service and other agencies.

(c) If an employer proves to the satisfaction of the Department that the worker is customarily engaged in an independently established trade, occupation, profession or business of the same nature as the service in question, there will be a rebuttable presumption that the employer did not have the right of or exercise direction or control over the service.

(2) Control and Direction.

(a) When an employer retains the right to control and direct the performance of a service, or actually exercises control and direction over the worker who performs the service, not only as to the result to be accomplished by the work but also as to the manner and means by which that result is to be accomplished, the worker is an employee of the employer for the purposes of the Act.

(b) The following factors, if applicable, will be used as aids in determining whether an employer has the right of or exercises control and direction over the service of a worker:

(i) Instructions. A worker who is required to comply with other persons' instructions about how the service is to be performed is ordinarily an employee. This factor is present if the employer for whom the service is performed has the right to require compliance with the instructions.

(ii) Training. Training a worker by requiring or expecting an experienced person to work with the worker, by corresponding with the worker, by requiring the worker to attend meetings, or by using other methods, indicates that the employer for whom the service is performed expects the service to be performed in a particular method or manner.

(iii) Pace or Sequence. A requirement that the service must be provided at a pace or ordered sequence of duties imposed by the employer indicates control or direction. The coordinating and scheduling of the services of more than one worker does not indicate control and direction.

(iv) Work on Employer's Premises. A requirement that the service be performed on the employer's premises indicates that the employer for whom the service is performed has retained a right to supervise and oversee the manner in which the service is performed, especially if the service could be performed elsewhere.

(v) Personal Service. A requirement that the service must be performed personally and may not be assigned to others indicates the right to control or direct the manner in which the work is performed.

(vi) Continuous Relationship. A continuous service relationship between the worker and the employer indicates that an employer-employee relationship exists. A continuous relationship may exist where work is performed regularly or at frequently recurring although irregular intervals. A continuous relationship does not exist where the worker is contracted to complete specifically identified projects, even though the service relationship may extend over a significant period of time.

(vii) Set Hours of Work. The establishment of set hours or a specific number of hours of work by the employer indicates control.

(viii) Method of Payment. Payment by the hour, week, or month points to an employer-employee relationship, provided that this method of payment is not just a convenient way of paying progress billings as part of a fixed price agreed upon as the cost of a job. Control may also exist when the employer determines the method of payment.

R994-204-401. Safe Haven Created by Independent Contractor Determinations.

The "safe haven" provision of 35A-4-204(4) allows an employer to rely on a declaratory order, ruling, or final determination by the Department that determines the independent contractor status of a worker or class of workers. A determination can be made at the request of an employer or by the Department as the result of an audit or status investigation. The final determination will only determine whether the employer is liable to pay contributions on payments made to the workers in question and does not affect the worker's right to challenge the determination at a more appropriate time like when the work relationship has ended and a claim for benefits has been filed. The worker, or class of workers, are not bound by the determination in the event a worker later files a claim for unemployment benefits.

R994-204-402. Procedure for Issuing a Safe Haven Determination.

(1) If the issue of the status of a worker or class of workers arises out of an audit or request for declaratory order and there is no claim for benefits pending at the time, the Department will determine the status on the basis of the best information available at the time. A request for a declaratory order will be denied if there is a pending claim for benefits by a worker who would be affected by the order.

(2) A worker whose status is determined as a result of an audit or declaratory order is not required to file a written consent to the determination pursuant to Subsection 63G-4-503(3)(b). Any consent given by the worker is invalid and will be considered to be in violation of Subsection 35A-4-103(1)(c)(ii).

(3) If the issue of a worker's status arises out of a claim for benefits and there has been a prior audit determination or declaratory order determining the status of the worker or a class of workers to which the individual belonged, the Department will issue a notice as part of the monetary determination, denying use of the worker's independent contractor earnings as wage credits for the base period on the basis of the prior status determination. The worker may protest the determination by filing an appeal within 15 days of the date of the notice. Upon receipt of a protest the Department will review the status of the worker. On the basis of its review, the Department will issue a new determination which will either affirm, reverse, or revise the original determination. The new determination will be mailed to the parties and can be appealed by the employer or the worker as though it were an "initial Department determination" as provided in rule Sections R994-508-101 through R994-508-104.

R994-204-403. Employer Reliance on Official Determination.

If a declaratory order or final audit finding has been issued concluding that a worker or class of workers are independent contractors, the employer will have no liability to pay unemployment contributions on payments made to the worker or workers, except as provided in Section R994-204-404.

R994-204-404. Effect of New Determination on Employer.

If a new determination by the Department, an administrative law judge, or the Workforce Appeals Board holds that the status of a worker or class of workers to which the individual belonged is that of employee for purposes of the Act, the employer is liable to pay unemployment contributions on all wages paid to workers in the class to which the individual belonged, from the beginning of the calendar quarter in which the new determination is made. In addition, the employer shall also be liable to pay contributions on any wages used by a claimant for purposes of establishing any claim for benefits affected by the new determination.

KEY: unemployment compensation, employment tests, independent contractor

July 1, 2007

35A-4-204

Notice of Continuation March 25, 2015

R994. Workforce Services, Unemployment Insurance.**R994-205. Exempt Employment.****R994-205-101. Exempt Domestic Service.**

Domestic services are exempt under the Act, provided they are not included in covered employment under Subsection 35A-4-205(1)(d).

R994-205-102. Exempt Family Service.

Certain family service is exempt from coverage under the Act based upon the type of employing entity.

(1) Sole proprietorship exempt family service includes the following relationships:

(a) A worker employed by his or her spouse.

(b) A parent employed by his or her son or daughter. The exemption also applies to a stepparent employed by his or her stepchild.

(c) A child under the age of 21 employed by his or her parent regardless of the child's marital status. The exempt relationship is met even if the child is an adopted child, stepchild, or foster child. The foster child must be living with the foster parent.

(2) Partnership family service is exempt from coverage if the worker has an exempt family relationship to all partners. Exempt family relationships are the same relationships as for sole proprietorships in subsection (1) of this section. However, it is not necessary for the same relationship to exist between the worker and each partner.

(a) Examples of partnership family relationships that are exempt include:

(i) A child employed by a partnership composed of the child's parents.

(ii) A woman employed by a partnership composed of her husband and her son.

(b) Examples of partnership family relationships that are not exempt include:

(i) A woman employed by a partnership composed of her husband and his brother is not exempt because the required family relationship between the woman and her brother-in-law does not exist.

(ii) A man employed by a partnership composed of his wife and his son-in-law is not exempt because the required family relationship between the man and his son-in-law does not exist.

(3) There are no exempt family relationships in corporations, limited liability companies, and any other entity types not discussed in this section.

R994-205-103. Exempt Employees Hired Temporarily for a Disaster.

The Act excludes the services of governmental entity or Indian tribe employees hired solely on a temporary basis for disaster-type emergencies.

(1) Temporary basis employment is not the same as intermittent or irregular employment. Intermittent or irregular employment involves an on-going relationship, such as workers with an "on-call" status.

(2) Disaster type emergencies are those that affect the community on a wide scale, such as a forest fire, storm, or flood. Incidents that affect a few individuals, such as a house fire or automobile accident are not disaster type emergencies.

R994-205-104. Exempt Casual Labor.

(1) Casual labor is exempt under the Act if:

(a) The service is not in the course of the employing unit's trade or business;

(b) The payment for such service is less than \$50 in a calendar quarter; and

(c) The worker performs such service on some portion of a day for less than 24 days in a calendar quarter or less than 24 days during the preceding calendar quarter.

(2) Services "not in the course of the employing unit's trade or business" include services that do not promote or advance the trade or business, such as services performed in connection with the employer's hobby or repairs to the employer's private home.

(3) Casual labor does not apply to domestic service exempt under subsection 35A-4-205(1)(d).

(4) Casual labor does not apply to any services performed for a corporation or limited liability company.

(5) Services performed by a worker for a property owner in regard to building or remodeling the owner's home are exempt if the requirements in subsection (1)(a) of this section are satisfied.

R994-205-105. Exempt Commission Insurance Sales.

Employment does not include services performed as an insurance agent or solicitor if payment for such services is solely by way of commission.

(1) An insurance solicitor is an employee of an insurance agent and is empowered to sell insurance on behalf of the agent. The solicitor usually does not have binding authority, and the business generated by the solicitor is usually owned by the agent, and not the solicitor.

(2) Services performed by a worker selling insurance are exempt if all such services are paid solely by way of commission.

(a) If any part of the payment for insurance sales services is a salary, all of the services are covered employment and the total payment, salary and commission, is subject to contribution payments.

(b) If a worker is guaranteed a minimum salary for any pay period in which sales commissions are less than the guaranteed minimum, all earnings are subject to contribution payments when the worker is paid the guaranteed salary. In any pay period in which the commissions equal or exceed the guaranteed salary, the earnings are considered to be solely by way of commission and are not subject to contribution payments.

(c) If the worker is given advances against future commissions and is required to repay any advances that exceed the commissions, the advances are considered to be payment solely by way of commission.

(d) If a worker performs both commission sales services and other salaried services, such as an accountant, the sales are excluded from employment and the other services are included in covered employment. If the payment for all services is for the same pay period, the "included and excluded" provisions of Subsection 35A-4-205(2) are applied.

R994-205-106. Exempt Real Estate Sales.

Employment does not include services as a licensed real estate agent if payment for such services is solely by way of commission.

(1) The "licensed" requirement refers to the license issued by the Utah Division of Real Estate to principal real estate brokers, associate real estate brokers, and real estate sales agents.

(2) The services performed as a real estate agent are those activities generally associated with the sale of real property. Such services include appraising property, advertising and showing property, closing sales, acquiring a lease to the property, and recruiting, training and supervising other salespersons. The services performed as a real estate agent do not include the management of property.

(3) Services performed by a worker as a licensed real estate agent are exempt if all such services are paid solely by way of commission.

(a) If any part of the payment for real estate sales services is a salary, all of the services are covered employment and the total payment, salary and commission is subject to contribution payments.

(b) If a worker performing real estate sales services is guaranteed a minimum salary for any pay period in which sales commissions are less than the guaranteed minimum, all earnings are

subject to contribution payments when the worker is paid the guaranteed salary. In any pay period in which the commissions equal or exceed the guaranteed salary, the earnings are considered to be solely by way of commission and are not subject to contribution payments.

(c) If a worker performing real estate sales services is given advances against future commissions and is required to repay any advances that exceed the commissions, the advances against future commissions are considered to be payment solely by way of commission.

(4) If a worker performs both commission sales services and other salaried services, such as an accountant, the sales are excluded from employment and the other services are included in covered employment. If the payment for all services is for the same pay period, the "included and excluded" provisions of Subsection 35A-4-205(2) are applied.

R994-205-107. Exempt Outside Sales.

The Act excludes the services of salespersons if the services are performed outside the employer's place of business, the salesperson is paid solely by way of commission, the services are not employment at common law, and the services are not employment as a traveling or city salesperson defined in Subsection 35A-4-204(2)(i).

(1) The employer's place of business is defined as an establishment where business is conducted, services are rendered, retail sales are made, or goods are manufactured, stored, or processed. This definition also includes temporary places of business such as booths or exhibits at trade shows, fairs and festivals.

(2) A commission is defined as a payment calculated as a percentage of the sales volume or value. Outside sales services are exempt if all such services are paid solely by way of commission.

(a) If any part of the payment for outside sales services is a salary, all of the services are covered employment and the total payment, salary and commission, is subject to contribution payments.

(b) If a worker is guaranteed a minimum salary for any pay period in which sales commissions are less than the guaranteed minimum, all earnings are subject to contribution payments when the worker is paid the guaranteed salary. In any pay period in which the commissions equal or exceed the guaranteed salary, the earnings are considered to be solely by way of commission and are not subject to contribution payments.

(c) If the worker is given advances against future commissions and is required to repay any advances that exceed the commissions, the advances are considered to be payment solely by way of commission.

(d) If a worker performs both outside commission sales services and other salaried services, such as an accountant, the sales are excluded from employment and the other services are included in covered employment. However, if the payment for all services is for the same pay period, the "included and excluded" provisions of Subsection 35A-4-205(2) are applied.

(3) Employment at common law is defined by the Internal Revenue Service's current common law rules.

(4) An outside salesperson may perform incidental activities at the employer's place of business, such as writing up and transmitting orders, replenishing sales supplies, or attending sales meetings, provided such activities are not routine, without losing the classification as an outside salesperson.

R994-205-201. Included and Excluded Service.

When a worker performs both included and excluded services for an employer during a pay period, all the services are considered to be included or excluded for that pay period, depending on the time spent in each activity.

(1) Time Spent in a Pay Period.

(a) If 50% or more of a worker's time is spent performing services that constitute employment, all the services are considered to be covered employment.

(b) This 50% test is applied to each pay period. A worker could have all services included in covered employment during one period and excluded in another.

(2) Employer Must Verify Time Spent.

In order to have all services performed by a worker excluded from covered employment, the employer must show to the satisfaction of the Department that less than 50% of the time spent in any pay period is for services that constitute employment.

(3) Pay Period.

Subsection 35A-4-205(2) does not apply if there is no regular pay period, the pay period covers more than 31 consecutive days or there are separate pay periods for the included and excluded services.

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35A-4-205

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R994. Workforce Services, Unemployment Insurance.

R994-206. Agricultural Labor.

R994-206-101. Definition of Agricultural Labor.

Agricultural labor is exempt under Subsection 35A-4-205(1)(c) of the Act unless it is covered under Subsection 35A-4-204(2)(j). Subsection 35A-4-204(2)(j) covers larger agricultural employers based on wages paid or number of workers employed.

(1) Definition of Agricultural Terms.

The terms used in Section R994-206-101 are defined as follows:

(a) Agricultural Commodities.

Agricultural commodities include livestock, bees, poultry, fur-bearing animals, wildlife and all crops such as fruits, nuts, vegetables, grains and other commodities grown in the soil or other growth mediums for use or profit.

(b) Horticultural Commodities.

Horticultural commodities are flowers and nursery products such as sod, fruit trees, shade trees, Christmas trees, ornamental plants and shrubs.

(c) Raising and Harvesting.

Raising includes planting the seeds, watering or irrigating, applying insecticide or fertilizer and otherwise caring for the commodity prior to harvesting. In regard to livestock, bees, poultry, fur-bearing animals and wildlife, raising includes caring for, feeding, shearing, breeding, training and management. Harvesting includes picking, cutting, threshing, shucking corn, baling hay, and hulling nuts. Horticultural commodities are harvested when they are made available for sale.

(d) Farm.

A farm includes stock, dairy, poultry, fruit, fur-bearing animal, and truck farms, plantations, ranches, nurseries, ranges, orchards, and such greenhouses and other similar structures as are used primarily for the raising of agricultural or horticultural commodities. Greenhouses and other similar structures used primarily for other purposes, such as display, storage, and fabrication of wreaths, corsages, and bouquets, do not constitute "farms".

(2) Agricultural Labor as Defined in Subsection 35A-4-206(1)(a).

(a) Agricultural labor includes services performed on a farm by a worker for any person in connection with any of the following activities:

(i) The cultivation of the soil;

(ii) The raising, shearing, feeding, caring for, training, or management of livestock, bees, poultry, fur-bearing animals, or wildlife; or

(iii) The raising or harvesting of any other agricultural or horticultural commodity.

(b) Services performed in connection with the production or harvesting of maple sap, or in connection with the raising or harvesting of mushrooms, or in connection with the hatching of poultry constitute agricultural labor only if such services are performed on a farm. Thus, services performed in connection with the operation of a hatchery, if not operated as part of a poultry or other farm, do not constitute agricultural labor.

(3) Agricultural Labor as Defined in Subsection 35A-4-206(1)(b).

(a) Agricultural labor includes the following activities performed by a worker in the employ of the owner or tenant or other operator of one or more farms, provided the major part, defined as 50% or more, of such services is performed on a farm:

(i) Services performed in connection with the operation, management, conservation, improvement, or maintenance of any of such farms or its tools or equipment; or

(ii) Services performed in salvaging timber, or clearing land of brush and other debris, left by a hurricane, storm, flood, or other natural disaster.

(b) The services described in subparagraph (a)(i) of this section may include services performed by carpenters, painters, mechanics, farm supervisors, irrigation engineers, bookkeepers, and other skilled or semi-skilled workers, which contribute in any way to the conduct of the farm or farms operated by the person employing

them. Since the services described in this paragraph must be performed in the employ of the owner or tenant or other operator of the farm, the term "agricultural labor" does not include services performed by workers of commercial concerns that contract with a farmer to repair, maintain, or renovate farm properties.

(4) Agricultural Labor as Defined in Subsection 35A-4-206(1)(c).

Agricultural labor includes the following activities performed by a worker in the employ of any person without regard to the place where such services are performed:

(a) the production or harvesting of agricultural commodities defined in the Federal Agricultural Marketing Act, 12 U.S.C. 1141j. These commodities are limited to crude gum, also known as oleoresin, from a living tree and gum spirits of turpentine and gum rosin processed from crude gum by the original producer of the crude gum; or

(b) the ginning of cotton; or

(c) the operation or maintenance of ditches, canals, reservoirs or water ways if not owned or operated for profit and used primarily for farming purposes.

(5) Agricultural Labor as defined in Section 35A-4-206(1)(d).

(a) Agricultural labor includes services performed by a worker in the handling, planting, drying, packing, packaging, processing, freezing, grading, storing, or delivering to storage or to market or to a carrier for transportation to market, of any agricultural or horticultural commodity if:

(i) Such services are performed by the worker in the employ of an operator of a farm or in the employ of a group of operators of farms, other than a cooperative organization; and

(ii) Such services are performed with respect to the commodity in its unmanufactured state; and

(iii) Such operator produced more than one-half of the commodity with respect to which such services are performed during the pay period, or such group of operators produced all of the commodity with respect to which such services are performed during the pay period.

(b) The term "operator of a farm" as used in this section means an owner, tenant, or other person, in possession of a farm and engaged in the operation of such farm.

(c) The services described in this paragraph do not constitute agricultural labor if performed in the employ of a cooperative organization. The term "organization" includes corporations, joint-stock companies, and associations which are treated as corporations pursuant to section 7701(a)(3) of the Internal Revenue Code. For purposes of this paragraph, any unincorporated group of operators shall be deemed a cooperative organization if the number of operators comprising such group is more than 20 at any time during the calendar quarter in which the services involved are performed.

(d) Processing services which change the commodity from its raw or natural state do not constitute agricultural labor. For example, the extraction of juices from fruits or vegetables is a processing operation which changes the character of the fruits or vegetables from their raw or natural state and, therefore, does not constitute agricultural labor. Likewise, services performed in the processing of maple sap into maple syrup or maple sugar do not constitute agricultural labor. On the other hand, services rendered in the cutting and drying of fruits or vegetables are processing operations which do not change the character of the fruits or vegetables and, therefore, constitute agricultural labor, if the other requisite conditions are met. Services performed with respect to a commodity after its character has been changed from its raw or natural state by a processing operation do not constitute agricultural labor.

(e) The term "commodity" refers to a single agricultural or horticultural product, for example, all apples are to be treated as a single commodity, while apples and peaches are to be treated as two separate commodities. The services with respect to each such

commodity are to be considered separately in determining whether the condition set forth in subparagraph (a)(iii) of this subsection has been satisfied. The portion of the commodity produced by an operator or group of operators with respect to which the services described in this paragraph are performed by a particular worker shall be determined on the basis of the pay period in which such services were performed by such worker.

(f) The services described in this paragraph do not include services performed in connection with commercial canning or commercial freezing or in connection with any commodity after its delivery to a terminal market for distribution for consumption. Moreover, since the services described in this paragraph must be rendered in the actual handling, planting, drying, packing, packaging, processing, freezing, grading, storing, or delivering to storage or to market or to a carrier for transportation to market of the commodity, such services do not, for example, include services performed as stenographers, bookkeepers, clerks, and other office employees, even though such services may be in connection with such activities. However, to the extent that the services of such individuals are performed in the employ of the owner or tenant or other operator of a farm and are rendered in major part on a farm, they may be within the provisions of paragraph (3) of this section.

(6) Examples of the Application of the Definition of Agricultural Labor.

(a) Raising and Selling.

Services in connection with raising agricultural or horticultural commodities are agricultural labor. However, if this business also sells the commodity, the selling activity is not agricultural labor unless performed on the farm.

(b) Agricultural Labor Included and Excluded Services.

If the same worker performs both agricultural and nonagricultural labor, the entire service will be considered to be agricultural labor if 50% or more of the time in a pay period was spent in agricultural labor. For reference see Subsection 35A-4-205(2).

(c) Poultry Hatchery.

Poultry hatchery services are agricultural labor provided they are performed on the farm or in the employ of a farm operator or group of operators who produced more than one-half the eggs. Services for a commercial hatchery that is not part of a farm that raises poultry are not agricultural labor.

(d) Raising Livestock.

Raising livestock and related activities performed on a farm are agricultural labor. Services in connection with livestock held, cared for and fed in a feed lot over an extended period of time to make an appreciable weight increase are agricultural labor. However, operating a stable or stud farm where no animals are raised is not agricultural labor. Services in connection with racing horses, using livestock in rodeos, exhibiting livestock and training livestock for these purposes are not agricultural labor when not performed on the farm where the animals were raised.

(e) Forestry, Lumbering and Landscaping.

Services performed in forestry, lumbering and landscaping are not agricultural labor.

(f) Brine Shrimp Harvesting.

Services performed in harvesting brine shrimp are not agricultural labor unless the services are performed on a farm.

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R994. Workforce Services, Unemployment Insurance.

R994-304. Special Provisions Regarding Transfers of Unemployment Experience and Assigning Rates.

R994-304-101. Transfer of a Trade or Business, or Portion Thereof, with Common Ownership, Management, or Control.

(1) The term "person" includes an individual, trust, estate, partnership, association, limited liability company, corporation, government entity, or Indian tribe. The "predecessor employer" is the employer that transfers its trade or business, or a portion of its trade or business, to another employer. The "successor employer" is the employer that acquires the trade or business, or a portion of the trade or business.

(2) Common ownership exists if an employer transfers a trade or business, or a portion of a trade or business, to another employer and at the time of the transfer:

(a) the predecessor employer owns 50% or more of the trade or business of the successor employer. For entities that issue shares of stock ownership, 50% or more of the "voting shares" of stock interest must be common to both; or

(b) an individual with a controlling interest in the predecessor trade or business, transfers that controlling interest to an individual in the successor trade or business and the parties are related in one of the following ways:

- (i) spouse;
- (ii) parent;
- (iii) step parent;
- (iv) child;
- (v) step child;
- (vi) sibling; or
- (vii) step sibling.

(3) The Department will determine common management or control using the best available evidence.

(a) Common management will be found if the predecessor and successor employers have the same or similar:

- (i) managers, officers, board of directors;
- (ii) personnel and human resource policies;
- (iii) operating procedures;
- (iv) sales and pricing policies;
- (v) collection procedures;
- (vi) financing policies;
- (vii) accounting practices; or
- (viii) purchasing practices.

(b) Common control will be found where the predecessor and successor employers have the same or similar:

- (i) control of the assets used to conduct the business enterprise;
- (ii) financing and/or leasing arrangements;
- (iii) contracts; or
- (iv) business, professional, and regulatory licenses of the business enterprise.

(4) The factors listed in subsections 3(a) and (3)(b) of this section are not exclusive and are intended as aids for analyzing the facts of each case. The degree of importance of each factor in those subsections varies depending on the nature of the trade or business transferred. Some do not apply to certain trades or businesses and, therefore, should not be given any weight. The Department will scrutinize the facts in each case to assure that the form of the transfer does not obscure the substance of the transfer.

R994-304-102. Notification Requirements.

(1) All parties to a transfer described in Section 35A-4-304(3)(a) must provide the following information to the Department within 30 days of the transfer date:

- (a) the effective date of the transfer.
- (b) the percentage of the assets, trade or business, and workforce transferred.
- (c) the reason for the transfer.

(d) the following information for both the predecessor and the successor employers:

- (i) name;
- (ii) street address;
- (iii) Utah Unemployment Insurance Registration Numbers, if one has been assigned; and
- (iv) Federal Employer Identification Numbers (FEIN), if one has been assigned.

(e) the name and Social Security number (SSN) or FEIN of any successor employer who was also a predecessor employer, or any individual who is related to the predecessor. Related means to have a family relationship as described in Section R994-304-101(2)(b).

(f) common management and control practices that were retained from the predecessor employer.

(g) any other information requested by the Department.

R994-304-103. Recalculation and Effective Date of Contribution Rates.

Any employer that is a party to a transfer of an employer's trade or business described in Section 35A-4-304(3)(a) shall have its contribution rate recalculated. The effective date of the recalculation shall be the first day of the calendar quarter following the actual date of the transfer, unless the actual transfer occurred on the first day of a calendar quarter, in which case the recalculation takes effect on that day.

R994-304-104. Identification of the Transfer or Acquisition of an Employer's Workforce.

The Department will develop and implement programs to aid in the detection and identification of employers that transfer or acquire all or a portion of another employer's workforce.

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