UTAH STATE BULLETIN

OFFICIAL NOTICES OF UTAH STATE GOVERNMENT
Filed December 16, 2006, 12:00 a.m. through January 2, 2007, 11:59 p.m.

Number 2007-2
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Kenneth A. Hansen, Director
Nancy L. Lancaster, Editor

The *Utah State Bulletin (Bulletin)* is an official noticing publication of the executive branch of Utah State Government. The Department of Administrative Services, Division of Administrative Rules produces the *Bulletin* under authority of Section 63-46a-10, *Utah Code Annotated* 1953.

Inquiries concerning administrative rules or other contents of the *Bulletin* may be addressed to the responsible agency or to: Division of Administrative Rules, 4120 State Office Building, Salt Lake City, Utah 84114, telephone (801) 538-3218, FAX (801) 538-1773. To view rules information, and on-line versions of the division's publications, visit: http://www.rules.utah.gov/

The information in this *Bulletin* is summarized in the *Utah State Digest (Digest)*. The *Digest* is available by E-mail or over the Internet. Visit http://www.rules.utah.gov/publicat/digest.htm for additional information.

Division of Administrative Rules, Salt Lake City 84114

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EDITOR'S NOTES

CORRECTION TO EXTENSION NOTICE IN JANUARY 1, 2007, BULLETIN

In the January 1, 2007, issue of the *Utah State Bulletin* (2007-1, page 57), the DAR No. was incorrectly listed for the extension notice for Rule R698-100 from Public Safety, Administration. The number published was 293 (it was missing the last two digits). The correct DAR No. for the extension notice for Rule R698-100 is 29331. The rest of the notice was correct.

Questions regarding this error may be directed to: Nancy L. Lancaster, Publications Editor, Division of Administrative Rules, PO Box 141007, Salt Lake City UT 84114-1007; Phone: (801) 538-3218; FAX: (801) 538-1773; or E-mail: nllancaster@utah.gov.

End of the Editor's Notes Section

NOTICES OF
PROPOSED RULES

A state agency may file a PROPOSED RULE when it determines the need for a new rule, a substantive change to an existing rule, or a repeal of an existing rule. Filings received between December 16, 2006, 12:00 a.m., and January 2, 2007, 11:59 p.m. are included in this, the January 15, 2007, issue of the *Utah State Bulletin*.

In this publication, each PROPOSED RULE is preceded by a RULE ANALYSIS. This analysis provides summary information about the PROPOSED RULE including the name of a contact person, anticipated cost impact of the rule, and legal cross-references.

Following the RULE ANALYSIS, the text of the PROPOSED RULE is usually printed. New rules or additions made to existing rules are underlined (e.g., example). Deletions made to existing rules are struck out with brackets surrounding them (e.g., [~~example~~]). Rules being repealed are completely struck out. A row of dots in the text (· · · · · ·) indicates that unaffected text was removed to conserve space. If a PROPOSED RULE is too long to print, the Division of Administrative Rules will include only the RULE ANALYSIS. A copy of each rule that is too long to print is available from the filing agency or from the Division of Administrative Rules.

The law requires that an agency accept public comment on PROPOSED RULES published in this issue of the *Utah State Bulletin* until at least February 14, 2007. The agency may accept comment beyond this date and will list the last day the agency will accept comment in the RULE ANALYSIS. The agency may also hold public hearings. Additionally, citizens or organizations may request the agency to hold a hearing on a specific PROPOSED RULE. Section 63-46a-5 requires that a hearing request be received "in writing not more than 15 days after the publication date of the PROPOSED RULE."

From the end of the public comment period through May 15, 2007, the agency may notify the Division of Administrative Rules that it wants to make the PROPOSED RULE effective. The agency sets the effective date. The date may be no fewer than seven calendar days after the close of the public comment period nor more than 120 days after the publication date of this issue of the *Utah State Bulletin*. Alternatively, the agency may file a CHANGE IN PROPOSED RULE in response to comments received. If the Division of Administrative Rules does not receive a NOTICE OF EFFECTIVE DATE or a CHANGE IN PROPOSED RULE, the PROPOSED RULE filing lapses and the agency must start the process over.

The public, interest groups, and governmental agencies are invited to review and comment on PROPOSED RULES. *Comment may be directed to the contact person identified on the RULE ANALYSIS for each rule.*

PROPOSED RULES are governed by Section 63-46a-4; and Rule R15-2, and Sections R15-4-3, R15-4-4, R15-4-5, R15-4-9, and R15-4-10.

The Proposed Rules Begin on the Following Page.

Commerce, Consumer Protection
R152-26
Telephone Fraud Prevention Act

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29379
FILED: 01/02/2007, 11:41

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: While conducting its five-year review of the Telephone Fraud Prevention Act Rules, the Division determined that certain statutory references were incorrect. The proposed amendment updates those statutory references. Additionally, it was determined that Section R152-26-6 could be removed due to the change in language of Subsection 13-26-3(1) resulting from H.B. 186 passed by the Utah State Legislature during the 2005 General Session. The change eliminates Section R152-26-6 because it is now unnecessary. (DAR NOTE: H.B. 186 (2005) is found at Chapter 18, Laws of Utah 2005, and was effective 03/08/2005.)

SUMMARY OF THE RULE OR CHANGE: The proposed rule change updates statutory references and eliminates an unnecessary section of the rule.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 13-2-5

ANTICIPATED COST OR SAVINGS TO:
❖ THE STATE BUDGET: The filing only updates statutory references and eliminates an unnecessary section of the rule; therefore, there are no anticipated costs or savings to the state budget.
❖ LOCAL GOVERNMENTS: The filing only updates statutory references and eliminates an unnecessary section of the rule; therefore, there are no anticipated costs or savings to the local government.
❖ OTHER PERSONS: The filing only updates statutory references and eliminates an unnecessary section of the rule; therefore, there are no anticipated costs or savings to other persons.

COMPLIANCE COSTS FOR AFFECTED PERSONS: The filing only updates statutory references and eliminates an unnecessary section of the rule; therefore, there are no compliance costs.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: No fiscal impact to businesses is anticipated as a result of this rule filing which corrects references and removes an unnecessary provision. Francine Giani, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:
COMMERCE
CONSUMER PROTECTION
HEBER M WELLS BLDG
160 E 300 S
SALT LAKE CITY UT 84111-2316, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Thomas Copeland at the above address, by phone at 801-530-6601, by FAX at 801-530-6001, or by Internet E-mail at tcopeland@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/21/2007

AUTHORIZED BY: Kevin V Olsen, Director

R152. Commerce, Consumer Protection.
R152-26. Telephone Fraud Prevention Act.
R152-26-1. Authority.
These rules are promulgated pursuant to Section [~~13-2-5(2)~~]13-2-5 to administer the Utah Telephone Fraud Prevention Act.

[~~R152-26-6. Doing Business in the State.~~
~~For purpose of interpreting Section 13-26-3(1), "doing or continuing to do business in this state" means engaging in any conduct regulated by Title 13, Chapter 26.~~

]**R152-26-8. Isolated Transaction Exemption.**
For purposes of Section [~~13-26-4(2)(h)(i)~~]13-26-4(2)(i), an "isolated transaction" means no more than two occurrences in any twelve month period.

KEY: telephone, fraud, consumer
Date of Enactment or Last Substantive Amendment: [~~July 30, 2001~~]2007
Notice of Continuation: June 3, 2002
Authorizing, and Implemented or Interpreted Law: 13-2-5

♦ ♦

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

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29355
FILED: 12/18/2006, 15:55

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The Engineering Credentials Evaluation International (ECEI) has discontinued performing evaluations of education obtained in foreign countries to determine if it is equivalent to an Accreditation Board for Engineering and Technology (ABET) accredited degree. This function is now performed by the National Council of Examiners for Engineering and Surveying (NCEES) under the name of the Center for Professional Engineering Education Services (CPEES). As a result of this change, the rule needs to be updated to reflect the current entity that is available and competent to make this review.

SUMMARY OF THE RULE OR CHANGE: Throughout the rule, amendments are being proposed to change the rule from plural to singular. Also, throughout the rule references to the Engineering Credentials Evaluation International (ECEI) have been changed to reflect that the Center for Professional Engineering Education Services (CPEES) is now performing evaluations of education obtained in foreign countries. Also, three rule citations have been updated to reflect a correct paragraph.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 58-22-101 and Subsections 58-1-106(1)(a) and 58-1-202(1)(a)

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: The Division will incur minimal costs of approximately $100 to reprint the rule once these proposed amendments are made effective. Any costs incurred will be absorbed in the Division's current budget.

❖ LOCAL GOVERNMENTS: The proposed amendments do not apply to local governments; therefore, no costs or savings are anticipated. The proposed amendments only apply to potential licensees and licensees as either a professional engineer, professional structural engineer or professional land surveyor.

❖ OTHER PERSONS: The proposed amendments only apply to applicants for licensure and licensees as either a professional engineer, professional structural engineer, or professional land surveyor. The Division anticipates no costs or savings with these amendments as the amendments are only changing the name of an evaluation company. The proposed amendments do not impose any new or additional requirements for applicants or licensees.

COMPLIANCE COSTS FOR AFFECTED PERSONS: The proposed amendments only apply to applicants for licensure and licensees as either a professional engineer, professional structural engineer, or professional land surveyor. The Division anticipates no costs or savings with these amendments as the amendments are only changing the name of an evaluation company. The proposed amendments do not impose any new or additional requirements for applicants or licensees.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: No fiscal impact to business is anticipated as a result of this technical amendment to identify the new agency that performs evaluations of foreign education. Francine A. Giani, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

COMMERCE
OCCUPATIONAL AND PROFESSIONAL LICENSING
HEBER M WELLS BLDG
160 E 300 S
SALT LAKE CITY UT 84111-2316, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Dan S. Jones at the above address, by phone at 801-530-6720, by FAX at 801-530-6511, or by Internet E-mail at dansjones@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 1/17/2007 at 9:00 AM, Heber Wells Bldg, 160 E 300 S, Conference Room 475 (fourth floor), Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 02/22/2007

AUTHORIZED BY: J. Craig Jackson, Director

R156. Commerce, Occupational and Professional Licensing.
R156-22. Professional Engineers and Professional Land Surveyors Licensing Act Rule[~~s~~].
R156-22-101. Title.

Th[~~ese~~]is rule[~~s are~~] is known as the "Professional Engineers and Professional Land Surveyors Licensing Act Rule[~~s~~]".

R156-22-102. Definitions.

In addition to the definitions in Title 58, Chapters 1, 3a and 22, as used in Title 58, Chapters 1, 3a and 22, or th[~~ese~~]is rule[~~s~~]:

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

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

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

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

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

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

(b) is in an area where the licensee has demonstrated competence by adequate education, training and experience;

(c) arises from, and is directly related to, work performed in the licensed profession;

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

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

(6) "Recognized jurisdiction" as used in Subsection 58-22-302(4)(d)(i), for licensure by endorsement, means any state, district or territory of the United States, or any foreign country who issues licenses for professional engineers, professional structural engineers, or professional land surveyors, and whose licensure requirements include:

(a) Professional Engineer.

(i) a bachelors or post graduate degree in engineering or equivalent education as determined by the [~~Engineering Credentials Evaluation International (ECEI)~~]Center for Professional Engineering Services (CPEES) and four years of full time engineering experience under supervision of one or more licensed engineers; and

(ii) passing the NCEES Principles and Practice of Engineering Examination (PE).

(b) Professional Structural Engineer.

(i) a bachelors or post graduate degree in engineering or equivalent education as determined by the [~~Engineering Credentials Evaluation International (ECEI)~~]Center for Professional Engineering Services (CPEES) and four years of full time engineering experience under supervision of one or more licensed engineers;

(ii) passing the NCEES Structural I and II Examination; and

(iii) three years of licensed experience in professional structural engineering.

(c) Professional Land Surveyor.

(i) a two or four year degree in land surveying or equivalent education as determined by the [~~Engineering Credentials Evaluation International (ECEI)~~]Center for Professional Engineering Services (CPEES) and four years of full time land surveying experience under supervision of one or more licensed professional land surveyors; or eight years of full time land surveying experience under supervision of one or more licensed professional land surveyors; and

(ii) passing the NCEES Principles and Practice of Land Surveying Examination (PLS) or passing a professional land surveying examination that is substantially equivalent to the NCEES Principles and Practice of Land Surveying Examination.

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

(8) "TAC/ABET" means Technology Accreditation Commission/Accreditation Board for Engineering and Technology.

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

(10) "Unprofessional conduct" as defined in Title 58, Chapters 1 and 22, is further defined, in accordance with Subsection 58-1-203(5), in Section R156-22-502.

R156-22-103. Authority - Purpose.

Th[~~ese~~]is rule[~~s are~~]is adopted by the division under the authority of Subsection 58-1-106(1)(a) to enable the division to administer Title 58, Chapter 22.

R156-22-302b. Qualifications for Licensure - Education Requirements.

(1) Education requirements - Professional Engineer.

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

(a) The bachelors or post graduate engineering program shall be accredited by EAC/ABET or the Canadian Engineering Accrediting Board (CEAB).

(b) The post graduate engineering degree, when not accredited by EAC/ABET or CEAB, shall be earned from an institution which offers a bachelors or masters degree in an engineering program accredited by EAC/ABET or CEAB in the same specific engineering discipline as the earned post graduate degree and the applicant is responsible to demonstrate that the combined engineering related coursework taken (both undergraduate and post graduate) included coursework that meets or exceeds the engineering related coursework required for the EAC/ABET accreditation for the bachelor degree program.

(c) If the degree was earned in a foreign country, the engineering curriculum shall be determined to be equivalent to a EAC/ABET accredited program by the [~~Engineering Credentials Evaluation International~~]Center for Professional Engineering Services (CPEES). Only deficiencies in course work in the humanities, social sciences and liberal arts and no more than five semester hours in math, science or engineering, not to exceed a total of 10 semester hours noted by the credentials evaluation may be satisfied by successfully completing the deficiencies in course work at a recognized college or university approved by the division in collaboration with the board. Engineering course work deficiencies must be completed at an EAC/ABET approved program.

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

(2) Education requirements - Professional Land Surveyor.

In accordance with Subsection 58-22-302(3)(d), an equivalent land surveying program for licensure as a professional land surveyor is defined as an earned bachelors or masters degree from a curriculum related to land surveying and completion of a minimum of 22 semester hours or 32 quarter hours of course work in land surveying which shall include the following courses:

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

(i) boundary law;

(ii) writing legal descriptions;

(iii) public land survey system;

(iv) surveying field techniques; and

(b) the remainder of the 22 semester hours or 32 quarter hours may be made up of successful completion of courses from the following content areas:

(i) photogrammetry;

(ii) studies in land records or land record systems;

(iii) survey instrumentation;

(iv) global positioning systems;

(v) geodesy;

(vi) control systems;

(vii) land development;

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

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

(x) geographic information systems.

R156-22-302c. Qualifications for Licensure - Experience Requirements.

(1) General Requirements. These general requirements apply to all applicants under this chapter and are in addition to the specific license requirements in Subsections (2), (3) and (4).

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

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

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

(d) Unless otherwise provided in Subsection (1)(e), experience shall be gained under the direct supervision of a person licensed in the profession for which the license application is submitted. Supervision of an intern by another intern is not permitted.

(e) Experience is also acceptable when obtained in a work setting where licensure is not required or is exempted from licensure requirements, including experience obtained in the armed services if:

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

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

(f) Proof of supervision. The supervisor shall provide to the applicant the certificate of qualifying experience in a sealed envelope with the supervisor's seal stamped across the seal flap of the envelope, which the applicant shall submit with the application for licensure.

(g) In the event the supervisor is unavailable or refuses to provide a certification of qualifying experience, the applicant shall submit a complete explanation of why the supervisor is unavailable and submit verification of the experience by alternative means acceptable to the board, which shall demonstrate that the work was profession-related work, competently performed, and sufficient accumulated experience for the applicant to be granted a license without jeopardy to the public health, safety or welfare.

(h) In addition to the supervisor's docmentation, the applicant shall submit at least one verification of qualifying experience from a person licensed in the profession who has personal knowledge of the applicant's knowledge, ability and competence to practice in the profession applied for.

(i) Duties and responsibilities of a supervisor. The duties and responsibilities of a licensee under Subsection (1)(d) or other qualified person under Subsection (1)(e) include the following.

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

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

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

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

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

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

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

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

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

(x) The supervisor shall assure each supervisee has obtained the degree which is a prerequisite to the intern beginning to obtain qualifying experience.

(2) Experience Requirements - Professional Engineer.

(a) In accordance with Subsection 58-22-302(1)(e), an applicant for licensure as a professional engineer shall complete the following qualifying experience requirements:

(i) Submit verification of qualifying experience, obtained while under the supervision of one or more licensed professional engineers, which experience has been certified by the licensed professional who provided the supervision documenting completion of a minimum of four years of full time or equivalent part time qualifying experience in professional engineering approved by the division in collaboration with the board in accordance with the following:

(A) The qualifying experience must be obtained after meeting the education requirements.

(B) A maximum of three of the four years of qualifying experience may be approved by the board as follows:

(I) A maximum of three years of qualifying experience may be granted for teaching advanced engineering subjects in a college or university offering an engineering curriculum accredited by EAC\ABET.

(II) A maximum of three years of qualifying experience may be granted for conducting research in a college or university offering an engineering curriculum accredited by EAC/ABET provided the research is under the supervision of a licensed professional and is directly related to the practice of engineering, as long as such research has not been credited towards the education requirements. Therefore research which is included as part of the classwork, thesis or dissertation or similar work is not acceptable as additional work experience.

(III) A maximum of one year of qualifying experience may be granted for completion of a masters degree in engineering provided that both the earned bachelors and masters degree in engineering meet the program criteria set forth in Subsection R156-22-302b(1).

(IV) A maximum of two years of qualifying experience may be granted for completion of a doctorate degree in engineering provided that both the earned bachelors or masters degree and doctorate degree in engineering meet the program criteria set forth in Subsection R156-22-302b(1).

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

(c) Experience should include demonstration of, knowledge, application, and practical solutions using engineering mathematics, physical and applied science, properties of materials and the fundamental principles of engineering design.

(3) Experience Requirements - Professional Structural Engineer.

(a) In accordance with Subsection 58-22-302(2)(e), each applicant shall submit verification of three years of full time or equivalent part time professional structural engineering experience obtained while under the supervision of one or more licensed professional structural engineers, which experience is certified by the licensed structural engineer supervisor and is in addition to the qualifying experience required for licensure as a professional engineer.

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

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

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

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

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

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

(A) steel;

(B) concrete;

(C) wood; or

(D) masonry;

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

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

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

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

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

(4) Experience Requirements - Professional Land Surveyor.

(a) In accordance with Subsections 58-22-302(3)(d), an applicant for licensure as a professional land surveyor shall complete the following qualifying experience requirements:

(i) Submit verification of qualifying experience obtained under the supervision of one or more licensed professional land surveyors who have provided supervision, which experience is certified by the licensed professional land surveyor supervisor and is in accordance with the following:

(A) Applicants who have met the education requirements in Subsection 58-22-302(3)(d)(i) shall document four years of full time or equivalent part time qualifying experience in land surveying which experience may be obtained before, during or after completing the education requirements for licensure.

(B) Prior to January 1, 2007, applicants who did not complete the education requirements in Subsection 58-22-302(3)(d)(i) shall document eight years of qualifying experience in land surveying.

(b) The four years of qualifying experience required in R156-22-302c([~~3~~]4)(a)(i)(A) and four of the eight years required in R156-22-302c([~~3~~]4)(a)(i)(B) shall comply with the following:

(i) Two years of experience should be specific to field surveying with actual "hands on" surveying, including all of the following:

(A) operation of various instrumentation;

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

(C) public land survey systems;

(D) calculations;

(E) traverse;

(F) staking procedures;

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

(ii) Two years of experience should be specific to office surveying, including all of the following:

(A) drafting (includes computer plots and layout);

(B) reduction of notes and field survey data;

(C) research of public records;

(D) preparation and evaluation of legal descriptions; and

(E) preparation of survey related drawings, plats and record of survey maps.

(c) The remaining qualifying experience required in R156-22-302c(3)(a)(i)(B) shall include any aspects of the practice of land surveying under the supervision of a licensed professional land surveyor in accordance with Subsection 58-22-102(16).

R156-22-302d. Qualifications for Licensure - Examination Requirements.

(1) Examination Requirements - Professional Engineer.

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

(i) the NCEES Fundamentals of Engineering (FE) Examination with a passing score as established by the NCEES except that an applicant who has completed an undergraduate degree from an EAC/ABET accredited program and has completed a Ph.D. or doctorate in engineering from an institution that offers EAC/ABET undergraduate programs in the Ph.D. field of engineering is not required to take the FE examination;

(ii) the NCEES Principles and Practice of Engineering (PE) Examination other than Structural II with a passing score as established by the NCEES; and

(iii) pass all questions on the open book, take home Utah Law and Rules Examination, which is included as part of the application for licensure forms.

(b) If an applicant was approved by the Utah Division of Occupational and Professional Licensing to take the examinations required for licensure as an engineer under prior Utah statutes and rules and did take and pass all examinations required under such prior rules, the prior examinations will be acceptable to qualify for reinstatement of licensure rather than the examinations specified under Subsection R156-22-302d(1)(a).

(c) Prior to submitting an application for pre-approval to sit for the NCEES PE examination, an applicant must have successfully completed the qualifying experience requirements set forth in Subsection R156-22-302c(1), and have successfully completed the education requirements set forth in Subsection R156-22-302b(1).

(d) The admission criteria to sit for the NCEES FE examination is set forth in Section 58-22-306.

(2) Examination Requirements - Professional Structural Engineer.

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

(i) the NCEES Fundamentals of Engineering Examination (FE) with a passing score as established by the NCEES;

(ii) the NCEES Structural I and Structural II Examinations with a passing score as established by the NCEES; and

(iii) as part of the application for license, pass all questions on the open book, take home Utah Law and Rules Examination.

(b) Prior to submitting an application for pre-approval to sit for the NCEES Structural II examination, an applicant must have successfully completed the experience requirements set forth in Subsection R156-22-302c(2).

(3) Examination Requirements - Professional Land Surveyor.

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

(i) the NCEES Fundamentals of Land Surveying (FLS) Examination with a passing score as established by the NCEES;

(ii) the NCEES Principles and Practice of Land Surveying (PLS) Examination with a passing score as established by the NCEES; and

(iii) the Utah Local Practice Examination with a passing score of at least 75.

(b) Prior to submitting an application for pre-approval to sit for the NCEES PLS examination, an applicant must have successfully completed the education and qualifying experience requirements set forth in Subsections R156-22-302b(2) and 302c([~~3~~]4).

(4) Examination Requirements for Licensure by Endorsement.

In accordance with Subsection 58-22-302(4)(d)(ii), the examination requirements for licensure by endorsement are established as follows:

(a) Professional Engineer: An applicant for licensure as a professional engineer by endorsement shall comply with the examination requirements in Subsection R156-22-302d(1) except that the board may waive one or more of the following examinations under the following conditions:

(i) the NCEES FE Examination for an applicant who is a principal for five of the last seven years preceding the date of the license application and who was not required to pass the NCEES FE Examination for initial licensure from the recognized jurisdiction the applicant was originally licensed;

(ii) the NCEES PE Examination for an applicant who is a principal for five of the last seven years preceding the date of the license application, who has been licensed for 20 years preceding the date of the license application, and who was not required to pass the NCEES PE Examination for initial licensure from the recognized jurisdiction the applicant was originally licensed.

(b) Professional Structural Engineer: An applicant for licensure as a professional structural engineer by endorsement shall comply with the examination requirements in Subsection R156-22-302d(2) except that the board may waive the NCEES FE Examination for an applicant who is a principal for five of the last seven years preceding the date of the license application and who was not required to pass the NCEES FE Examination for initial licensure from the recognized jurisdiction the applicant was originally licensed.

(c) Professional Land Surveyor: An applicant for licensure as a professional land surveyor by endorsement shall comply with the examination requirements in Subsection R156-22-302d(3) except that the board may waive either the NCEES FLS Examination or the NCEES PLS Examination or both to an applicant who is a principal for five of the last seven years preceding the date of the license application and who was not required to pass the NCEES FLS Examination or the PLS Examination for initial licensure from the recognized jurisdiction the applicant was originally licensed.

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

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

(1) During each two year period ending on December 31 of each even numbered year, a licensed professional engineer, professional structural engineer and professional land surveyor shall be required to complete not less than 24 hours of qualified professional education directly related to the licensee's professional practice.

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

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

(a) have an identifiable clear statement of purpose and defined objective for the educational program directly related to the practice of a professional engineer, professional structural engineer, or professional land surveyor;

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

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

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

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

(4) Credit for qualified continuing professional education shall be recognized in accordance with the following:

(a) unlimited hours shall be recognized for professional education completed in blocks of time of not less than one hour in formally established classroom courses, seminars, or conferences;

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

(c) a maximum of four hours per two year period may be recognized for preparation of papers, articles, or books directly related to the practice of professional engineering, professional structural engineering or professional land surveying and submitted for publication; and

(d) a maximum of eight hours per two year period may be recognized at the rate of one hour for each hour served on committees or in leadership roles in any state, national or international organization for the development and improvement of the profession of professional engineering, professional structural engineering or professional land surveying but no more than four of the eight hours may be obtained from such activity in any one organization;

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

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

(6) If a licensee exceeds the 24 hours of qualified continuing professional education during the two year period, the licensee may carry forward a maximum of 12 hours of qualified continuing professional education into the next two year period.

(7) A licensee who documents they are engaged in full time activities or is subjected to circumstances which prevent that licensee from meeting the continuing professional education requirements established under this section may be excused from the requirement for a period of up to three years. However, it is the responsibility of the licensee to document the reasons and justify why the requirement could not be met.

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

(9) Any applicant for reinstatement who was not in compliance with the continuing education requirement at the time of the expiration of licensure shall be required to complete 24 hours of continuing education complying with th[~~ese~~]is rule[~~s~~] within two years prior to the date of application for reinstatement of licensure.

R156-22-305. Inactive Status.

(1) A person currently licensed and in good standing as a professional engineer, professional structural engineer or professional land surveyor may apply for a transfer of that license to inactive status if:

(a)(i) the licensee is at least 60 years of age;

(ii) the licensee is disabled; or

(iii) the division finds other good cause for believing that the licensee will not return to the practice as a professional engineer, professional structural engineer or professional land surveyor;

(b) the licensee makes application for transfer of status and registration and pays a registration fee determined by the department under Section 63-38-3.2; and

(c) the licensee, on application for transfer, certifies that he will not engage in the practice for which a license is required while on inactive status.

(2) Each inactive license shall be issued in accordance with the two-year renewal cycle established by Section R156-1-308a.

(3) Inactive status licensees may not engage in practice for which a license is required.

(4) Inactive status licensees are not required to fulfill the continuing professional education under th[~~ese~~]is rule[~~s~~].

(5) Each inactive status licensee is responsible for renewing his inactive license according to division procedures.

(6) An inactive status licensee may reinstate his license to active status by:

(a) submitting an application in a form prescribed by the division;

(b) paying a fee determined by the department under Section 63-38-3.2; and

(c) showing evidence of having completed the continuing professional education requirement established in Subsection R156-22-304(9).

KEY: engineers, surveyors, professional land surveyors, professional engineers
Date of Enactment or Last Substantive Amendment: [~~August 15, 2006~~]2007
Notice of Continuation: January 13, 2003
Authorizing, and Implemented or Interpreted Law: 58-22-101; 58-1-106(1)(a); 58-1-202(1)(a)

♦ ♦

Commerce, Occupational and Professional Licensing

R156-40a

Athletic Trainer Licensing Act Rule

NOTICE OF PROPOSED RULE
(New Rule)
DAR FILE NO.: 29353
FILED: 12/18/2006, 15:51

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The Division and the Athletic Trainer Licensing Board are proposing this new rule to implement the Athletic Trainer Licensing Act, Title 58, Chapter 40a, that was enacted during the 2006 General Session of the Legislature in H.B. 74. (DAR NOTE: H.B. 74 (2006) is found at Chapter 206, Laws of Utah 2006, and was effective 05/01/2006.)

SUMMARY OF THE RULE OR CHANGE: This new rule provides the following: title, authority/purpose, organization/relationship to Rule R156-1, qualifications for licensure - athletic training curriculum requirement defined and renewal cycle/procedures.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 58-40a-101 and Subsections 58-1-106(1)(a) and 58-1-202(1)(a)

THIS RULE OR CHANGE INCORPORATES BY REFERENCE THE FOLLOWING MATERIAL: Adds the "Standards for the Accreditation of Entry-Level Athletic Training Education Programs", dated June 8, 2006, published by the Commission on Accreditation of Athletic Training Education (CAATE)

ANTICIPATED COST OR SAVINGS TO:

- THE STATE BUDGET: The newly established rule will need to be printed and distributed to interested parties at an estimated cost of $75 which can be absorbed within the Division's current budget.
- LOCAL GOVERNMENTS: No fiscal impact on local governments is anticipated because local governments are not required to seek licensure as an athletic trainer.
- OTHER PERSONS: Individuals who seek licensure as an athletic trainer will incur the cost of required education, certification examination and licensure fees (initial application and renewal) as was addressed in the fiscal note the Division completed for H.B. 74. No additional costs will be incurred as a result of adoption of this proposed rule. For individuals who seek licensure as an athletic trainer, the following Division fees will apply: initial application fee is $70 and the renewal fee is $47 every 2 years. The Division is unable to determine an aggregate amount due to the fact that the Division does not know how many persons will apply for licensure as an athletic trainer.

COMPLIANCE COSTS FOR AFFECTED PERSONS: For individuals who seek licensure as an athletic trainer, the following Division fees will apply: initial application fee is $70and the renewal fee is $47 every 2 years.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: This rule filing implements the Athletic Trainer Licensing Act (ATLA), Section 58-40a-101 et seq. No fiscal impact to businesses is anticipated beyond those previously addressed upon passage of the ATLA during the 2006 Legislative Session. Francine A. Giani, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:
COMMERCE
OCCUPATIONAL AND PROFESSIONAL LICENSING
HEBER M WELLS BLDG
160 E 300 S
SALT LAKE CITY UT 84111-2316, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Noel Taxin at the above address, by phone at 801-530-6621, by FAX at 801-530-6511, or by Internet E-mail at ntaxin@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 1/23/2007 at 9:00 AM, Heber Wells Bldg, 160 E 300 S, Conference Room 402 (fourth floor), Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 02/22/2007

AUTHORIZED BY: J. Craig Jackson, Director

R156. Commerce, Occupational and Professional Licensing.
R156-40a. Athletic Trainer Licensing Act Rule.
R156-40a-101. Title.
This rule is known as the Athletic Trainer Licensing Act Rule.

R156-40a-104. 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 40a.

R156-40a-105. 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.

R156-40a-302a. Qualifications for Licensure.
In accordance with Subsection 58-40a-302(1), the "athletic training curriculum requirement" shall be the curriculum program standard for accreditation set forth in the Standards for the Accreditation of Entry-Level Athletic Training Education Programs, revised June 8, 2006, published by the Commission on Accreditation of Athletic Training Education (CAATE), which is hereby adopted and incorporated by reference.

R156-40a-304. 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 40a is established by rule in Subsection R156-1-308a(1).

(2) Renewal procedures shall be in accordance with Section R156-1-308c.

KEY: licensing, occupational licensing, athletic trainers
Date of Enactment or Last Substantive Amendment: 2007
Authorizing, and Implemented or Interpreted Law: 58-40a-101; 58-1-106(1)(a); 58-1-202(1)(a)

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Commerce, Occupational and Professional Licensing

R156-42a

Occupational Therapy Practice Act Rules

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29356
FILED: 12/20/2006, 09:54

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The Division has been evaluating the need for each profession's law/rule examination and has determined that the law/rule examinations for applicants for licensure as either an occupational therapist or occupational therapy assistant can be deleted with no negative impact on the profession.

SUMMARY OF THE RULE OR CHANGE: Throughout the rule, amendments are being proposed to change the rule from plural to singular. In Section R156-42a-302, a reference to the Occupational Therapy Law and Rule Examination is deleted.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 58-42a-101 and Subsections 58-1-106(1)(a) and 58-1-202(1)(a)

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: The Division will incur minimal costs of approximately $75 to reprint the rule once the proposed amendments are made effective. Any costs incurred will be absorbed in the Division's current budget.

❖ LOCAL GOVERNMENTS: The proposed amendments do not apply to local governments; therefore, no costs or savings are anticipated. The proposed amendments only apply to applicants for licensure as either an occupational therapist or occupational therapy assistant.

❖ OTHER PERSONS: The proposed amendments only apply to applicants for licensure as either an occupational therapist or occupational therapy assistant. Those applicants for licensure will see a savings of $60 in that they will no longer be required to take the Utah Occupational Therapy Law and Rule Examination. The Division estimates approximately 72 new occupational therapist and occupational therapy assistants are licensed on a yearly basis, thus resulting in an aggregate savings of $4,320. It should be noted however, that any testing agency which the Division has contracted with to give the law/rule examination will see a decrease in the examination fees noted above.

COMPLIANCE COSTS FOR AFFECTED PERSONS: The proposed amendments only apply to applicants for licensure as either an occupational therapist or occupational therapy assistant. Those applicants for licensure will see a savings of $60 in that they will no longer be required to take the Utah Occupational Therapy Law and Rule Examination. It should be noted however, that any testing agency which the Division has contracted with to give the law/rule examination will see a decrease in the examination fees noted above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The regulated industry will experience a cost-savings as a result of the elimination of the Utah Law and Rule examination. No further fiscal impact to businesses is anticipated. Francine A. Giani, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

COMMERCE
OCCUPATIONAL AND PROFESSIONAL LICENSING
HEBER M WELLS BLDG
160 E 300 S
SALT LAKE CITY UT 84111-2316, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Noel Taxin at the above address, by phone at 801-530-6621, by FAX at 801-530-6511, or by Internet E-mail at ntaxin@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 1/23/2007 at 1:00 PM, Heber Wells Bldg, 160 E 300 S, Conference Room 402 (fourth floor), Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 02/22/2007

AUTHORIZED BY: J. Craig Jackson, Director

R156. Commerce, Occupational and Professional Licensing.
R156-42a. Occupational Therapy Practice Act Rule[~~s~~].
R156-42a-101. Title.

This[~~ese~~] rule[~~s are~~] is known as the "Occupational Therapy Practice Act Rule[~~s~~]".

R156-42a-102. Definitions.

In addition to the definitions in Title 58, Chapters 1 and 42a, as used in Title 58, Chapters 1 and 42a, or th[~~ese~~]is rule[~~s~~]:

(1) "General supervision", as used in Section 58-42a-304 and Subsection R156-42a-302b(2), means the supervising occupational therapist is:

(a) present in the area where the person supervised is performing services; and

(b) immediately available to assist the person being supervised in the services being performed.

(2) "Consult with the attending physician", as used in Subsection 58-42a-501(6), means that the occupational therapist will consult with the attending physician when an acute change of patient condition affects the occupational therapy services being performed.

(3) "Physical agent modalities", as used in Subsection 58-42a-102(9)(g), means specialized treatment procedures that produce a response in soft tissue through the use of light, water, temperature, sound or electricity such as hot packs, ice, paraffin, and electrical or sound currents.

(4) "Unprofessional conduct" as defined in Title 58, Chapters 1 and 42a, is further defined, in accordance with Subsection 58-1-203(5), in Section R156-42a-502.

R156-42a-103. Authority - Purpose.

Th[~~ese~~]is rule[~~s are~~] is adopted by the division under the authority of Subsection 58-1-106(1)(a) to enable the division to administer Title 58, Chapter 42a.

[

~~**R156-42a-302. Qualifications for Licensure - Examination Requirements.**~~

~~In accordance with Section 58-1-309, all applicants for licensure must pass the Occupational Therapy Law and Rule Examination.~~]

R156-42a-502. Unprofessional Conduct.

"Unprofessional conduct" includes:

(1) delegating supervision, or occupational therapy services, care or responsibilities not authorized under Title 58, Chapter 42a or th[~~ese~~]is rule[~~s~~];

(2) engaging in or attempting to engage in the use of physical agent modalities when not competent to do so by education, training, or experience; and

(3) failing to provide general supervision as set forth in Title 58, Chapter 42a and th[~~ese~~]is rule[~~s~~].

KEY: licensing, occupational therapy
Date of Enactment or Last Substantive Amendment: [~~August 4, 2003~~]2007
Notice of Continuation: September 2, 2004
Authorizing, and Implemented or Interpreted Law: 58-1-106(1)(a); 58-1-202(1)(a); 58-42a-101

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Commerce, Occupational and Professional Licensing

R156-57

Respiratory Care Practices Act Rules

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29354
FILED: 12/18/2006, 15:54

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The Division and Respiratory Care Licensing Board are proposing these amendments to clarify statutory amendments that were made during the 2006 General Session of the Legislature in H.B. 262. (DAR NOTE: H.B. 262 (2006) is found at Chapter 106, Laws of Utah 2006, and was effective 05/01/2006.)

SUMMARY OF THE RULE OR CHANGE: Throughout the rule, amendments are being proposed to change the rule from plural to singular. In Section R156-57-102, added a definition for "other respiratory related durable medical equipment intended for use in the home". In Section R156-57-303, updated a rule citation and added where renewal procedures are found in Rule R156-1.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 58-57-1 and Subsections 58-1-106(1)(a) and 58-1-202(1)(a)

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: The Division will incur minimal costs of approximately $75 to reprint the rule once the proposed amendments are made effective. Any costs incurred will be absorbed in the Division's current budget.

❖ LOCAL GOVERNMENTS: The proposed amendments do not apply to local governments; therefore, no costs or savings are anticipated. Proposed amendments only apply to potential licensees and licensees as a respiratory care practitioner.

❖ OTHER PERSONS: The proposed amendments only apply to applicants for licensure as a respiratory care practitioner and licensed respiratory care practitioners. The Division anticipates no costs or savings with these amendments as the amendments are only providing a clarification of requirements contained in the governing statute.

COMPLIANCE COSTS FOR AFFECTED PERSONS: The proposed amendments only apply to applicants for licensure as a respiratory care practitioner and licensed respiratory care practitioners. The Division anticipates no costs or savings with these amendments as the amendments are only providing a clarification of requirements contained in the governing statute.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: This rule filing provides a definition required by statute and makes minor technical changes to the rule. No fiscal impact to business is anticipated. Francine A. Giani, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

COMMERCE
OCCUPATIONAL AND PROFESSIONAL LICENSING

HEBER M WELLS BLDG
160 E 300 S
SALT LAKE CITY UT 84111-2316, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Noel Taxin at the above address, by phone at 801-530-6621, by FAX at 801-530-6511, or by Internet E-mail at ntaxin@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 1/23/2007 at 10:30 AM, Heber Wells Bldg, 160 E 300 S, Conference Room 402 (fourth floor), Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 02/22/2007

AUTHORIZED BY: J. Craig Jackson, Director

R156. Commerce, Occupational and Professional Licensing.
R156-57. Respiratory Care Practices Act Rule[s].
R156-57-101. Title.

Th[~~ese~~]is rule[~~s~~] [~~are~~]is known as the "Respiratory Care Practices Act Rule[~~s~~]".

R156-57-102. Definitions.

In addition to the definitions in Title 58, Chapters 1 and 57, as used in Title 58, Chapters 1 and 57, or th[~~ese~~]is rule[~~s~~]:

(1) "Other respiratory related durable medical equipment intended for use in the home", as used in Subsection 58-57-2(6)(k), means other new respiratory care technology intended for use in the home that was not approved on the market as of September 2006.

(2) "Supervised" as used in Subsection 58-1-307(1)(b) or "supervising" as used in Subsection 58-57-2(4)(e) means that the licensed respiratory care practitioner is present in the facility and shall be available to see the patient and give immediate consultation with respect to care.

R156-57-103. Authority - Purpose.

Th[~~ese~~]is rule[~~s~~] [~~are~~]is adopted by the division under the authority of Subsection 58-1-106(1)(a) to enable the division to administer Title 58, Chapter 57.

R156-57-303. 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 57 is established by rule in Section R156-1-308a.

(2) Renewal procedures shall be in accordance with Section R156-1-308c.

KEY: licensing, respiratory care[~~*~~]
Date of Enactment or Last Substantive Amendment: [~~May 2, 2000~~]2007
Notice of Continuation: October 30, 2006
Authorizing, and Implemented or Interpreted Law: 58-57-1; 58-1-106(1)(a); 58-1-202(1)(a)

Environmental Quality, Drinking Water
R309-100
Administration: Drinking Water Program

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29370
FILED: 12/26/2006, 13:06

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: NOTE: This rule change supersedes the rule amendment under DAR No. 29304 published in the December 15, 2006, issue of the Bulletin. This rule change is to update rule references, the exemption language and to incorporate the Drinking Water Board's desire that new public drinking water systems created to serve new residential subdivisions be sponsored by a body politic or political subdivision of the state.

SUMMARY OF THE RULE OR CHANGE: The proposed amendment adds subsections (f)(i) and (f)(ii) under Subsection R309-100-4(1) requiring that any new public drinking water system categorized as a community water system or a public water system serving water to multiple property owners no matter how the system is categorized shall be under the sponsorship of a body politic as defined in Section R309-110-4; and that existing privately-owned public drinking water systems which propose to expand their service to new subdivisions shall comply with Subsection R309-100-4(f)(i) before the Division will approve any plans and specifications for expanded service facilities or pipelines. The rule change also clarifies the exemption and variance compliance schedule timing and update the rule reference from Rule R309-150 to Rule R309-400.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-4-104

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: None--No additional cost or budget will be required for the Division to administer this proposed amendment as the Division's existing rules apply to public water systems without regard to ownership.

❖ LOCAL GOVERNMENTS: Some--Local county commissions will be petitioned by developers of new public drinking water systems constructed to serve potable water to new residential community subdivisions and perhaps some existing privately-owned systems to form a "body politic" for such and there are costs to be considered which may alter the county's tax base somewhat.

❖ OTHER PERSONS: Developers of new subdivisions may be moved to seek service from existing public drinking water districts rather than go through the process of petitioning for a body politic, but this should be beneficial to all customers of an existing district by increasing the customer base and therefore, reducing the cost per customer to cover maintenance and service.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Existing privately-owned public water systems will see no impact if they continue to serve only those lots (vacant or built-out) within their platted subdivision. It is only when they choose to extend outside those boundaries that they will be required to be sponsored by a body politic.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The department agrees that the proposed changes to this rule will have little to no detrimental impact on existing water systems nor on new public water systems. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
DRINKING WATER
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Patti Fauver or Bill Birkes at the above address, by phone at 801-536-4196 or 801-536-4201, by FAX at 801-536-4211 or 801-536-4211, or by Internet E-mail at pfauver@utah.gov or bbirkes@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

R309. Environmental Quality, Drinking Water.
R309-100. Administration: Drinking Water Program.
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, or

(b) Serves an average of at least 25 individuals daily at least 60 days out of the year.

(c) A ratio of 3.13 persons per connection shall be used to calculate the population served unless more accurate information is available. The ratio is based on the statewide average persons per residence in the 2000 census. Therefore, notwithstanding the above stated threshold for the number of service connections, a drinking water system consisting of at least 8 service connections shall be deemed to serve 25 people and consequently be classified as a public drinking water system. This ratio shall only be used to determine whether any particular water system is considered a public water system. Any person or entity may challenge this provision by submitting documentation to the Executive Secretary 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 Executive Secretary may be appealed to the Drinking Water Board.

(d) Submetered Properties.

(i) 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.

(ii) 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.

(iii) 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.

(iv) 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 (3) or plan review of modifications or changes to their systems (refer to R309-500).

(e) 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). All public water systems are further categorized into three different types, community water (CWS), non-transient non-community water (NTNCWS), and transient non-community water (TNCWS).

(f) Management and Control of Community and Certain Non-Community Public Drinking Water Systems.

(i) Beginning January 1, 2007 any new public drinking water system categorized as a community water system or a public water system serving water to multiple property owners no matter how the system is categorized shall be under the sponsorship of a body politic as defined in R309-110-4.

(ii) Existing privately owned public drinking water systems which propose to expand their service to new subdivisions shall comply with R309-100-4(1)(f)(i) before the Division will approve any plans and specifications for expanded service facilities or pipelines.

(2) Categories of Public Drinking Water Systems

Public drinking water systems are divided into three categories, as follows:

(a) "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.

(b) "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 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.

(3) 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 Board.

(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 Board.

R309-100-8. Rating System.

The Executive Secretary 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.[~~R309-150.~~]

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 is[~~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 Executive Secretary as directly influenced by surface water.

(5)[~~(6)~~] At the time[~~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 Executive Secretary as directly influenced by surface water.

(4) At the time[~~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
Date of Enactment or Last Substantive Amendment: March 6, 2007[~~September 13, 2005~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

♦ ♦

Environmental Quality, Drinking Water
R309-105
Administration: General Responsibilities of Public Water Systems

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29369
FILED: 12/26/2006, 13:06

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule change is to address the changes required by the federal Long Term 1 and 2 Surface Water Treatment rules (LT1 and LT2), the Stage 2 Disinfection Byproducts rule (Stage 2), and the Improvement Priority rule (IPS). There are a total of eight amendments that address these rules (Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150). This rule adoption is necessary to maintain primacy.

SUMMARY OF THE RULE OR CHANGE: Changes to the reporting and recordkeeping sections to incorporate the requirements of LT1, LT2, and Stage 2, and rule reference changes from Rule R309-150 to Rule R309-400.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Sections 19-4-104, and 40 CFR 141 Subparts T, W, L, U, and V

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Costs for the state budget, local governments, and other persons will be based on an aggregate for the changes in Rules R309-105, R309-110,

R309-200, R309-210, R309-215, R309-220, R309-225 and R309-150. The Environmental Protection Agency (EPA) estimates state costs to be $9,260,000 annually. Using the percentage of Utah systems versus the national total (approximately 1%), Utah's annual impact is approximately $92,600.

❖ LOCAL GOVERNMENTS: For this rule change, aggregate costs will vary by water system size, sources utilized, and type of treatment. EPA estimates the total national annual cost at $143,407,000. Again using the percentage of Utah systems versus the national total, Utah's systems' impact is estimated to be $1,434,070 annually.

❖ OTHER PERSONS: Other persons that own and operate a public water system may have the same cost impact as listed under "local government" above. Costs to consumers will vary depending upon the water system size. EPA estimates the cost to vary from $1 to $301 per household per year.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Aggregate compliance costs for the rule change will vary depending upon the water system size, type of source, and type of treatment. EPA estimates the cost to vary from $1 to $301 per household per year. The highest costs are associated with the very small public water systems where there are very few connections to spread the cost of monitoring and treatment across. Persons that own and operate a public water system may have the same cost impact as listed under "local government" above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The Department of Environmental Quality agrees with the comments in the cost and compliance summaries above. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
DRINKING WATER
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Patti Fauver at the above address, by phone at 801-536-4196, by FAX at 801-536-4211, or by Internet E-mail at pfauver@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

R309. Environmental Quality, Drinking Water.
R309-105. Administration: General Responsibilities of Public Water Systems.
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 Executive Secretary 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 Executive Secretary 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 Executive Secretary prior to approval of any plans or specifications for projects described in R309-105-6(3)(a).

(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 [~~R309-204 and~~]R309-500 through R309-550 of these rules. The Executive Secretary 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 [~~R309-204 and~~]R309-500 through R309-550 are not appropriate. Thus, the Executive Secretary 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.

(c) Alternative or new treatment techniques may be developed which are not specifically addressed by the applicable standards contained in [~~R309-204 and~~]R309-500 through R309-550. These treatment techniques may be accepted by the Executive Secretary 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 R309-204 and R309-500 through R309-550.

(iii) The technique is as reliable as any comparable treatment process governed by the applicable standards contained in R309-204 and 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 Executive Secretary.

(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.

R309-105-8. 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 [~~R309-204 and~~]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).

R309-105-10. 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 Division of Drinking Water.

(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 Executive Secretary. Residual checks shall be taken daily by the operator of any system using disinfectants. The Executive Secretary 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 Executive Secretary. 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[~~R309-204-7~~]).

(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 Executive Secretary. 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.

R309-105-12. 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 2003[~~2000~~] 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 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.

(5) 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.

R309-105-16. 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.

(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[~~, except for systems monitoring TTHMs in accordance with R309-210-9~~]. 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 Executive Secretary may choose[~~chose~~] 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 Executive Secretary 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 Executive Secretary, 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 [~~bacteriologic~~]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, Executive Secretary 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 Executive Secretary agency 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.

(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 Executive Secretary modifies the R309-210-10 monitoring requirements that you recommended in your IDSE report or if the Executive Secretary approves alternative monitoring locations, you must keep a copy of the Executive Secretary's notification on file for 10 years after the date of the Executive Secretary's notification. You must make the IDSE report and any Executive Secretary notification available for review by the Executive Secretary 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 Executive Secretary notification available for review by the Executive Secretary 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.

KEY: drinking water, watershed management
Date of Enactment or Last Substantive Amendment: March 6, 2007[~~March 8, 2006~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

♦ ♦

Environmental Quality, Drinking Water
R309-110
Administration: Definitions

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29364
FILED: 12/26/2006, 12:55

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: NOTE: This rule change supersedes the rule amendment under DAR No. 29307 published in December 15, 2006, issue of the Bulletin. This rule change is to address the changes required by the federal Long Term 1 and 2 Surface Water Treatment rules (LT1 and LT2), the Stage 2 Disinfection Byproducts rule (Stage 2), and the Improvement Priority rule (IPS). There are a total of eight amendments that address these rules (Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150). This rule adoption is necessary to maintain primacy. (DAR NOTE: The proposed amendments are as follows: Rule R309-105 under DAR No. 29369, Rule R309-110 under DAR No. 29364, Rule R309-200 under DAR No. 29371, Rule R309-210 under DAR No. 29365, Rule R309-215 under DAR No. 29366, Rule R309-220 under DAR No. 29367, Rule R309-225 under DAR No. 29368, and Rule R309-150 (changed to R309-400) under DAR No. 29363 all in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: This rule change adds several definitions to incorporate the requirements of LT1, LT2, and Stage 2 rules.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Sections 19-4-104 and 63-46b-4, and 40 CFR 141.2

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Costs for the state budget, local governments, and other persons will be based on an aggregate for the changes in Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150. The Environmental Protection Agency (EPA) estimates state costs to be $9,260,000 annually. Using the percentage of Utah systems versus the national total (approximately 1%), Utah's annual impact is approximately $92,600.

❖ LOCAL GOVERNMENTS: For this rule change, aggregate costs will vary by water system size, sources utilized, and type of treatment. EPA estimates the total national annual cost at $143,407,000. Again using the percentage of Utah systems versus the national total, Utah's systems' impact is estimated to be $1,434,070 annually.

❖ OTHER PERSONS: Other persons that own and operate a public water system may have the same cost impact as listed under "local government" above. Costs to consumers will vary depending upon the water system size. EPA estimates the cost to vary from $1 to $301 per household per year.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Aggregate compliance costs for the rule change will vary depending upon the water system size, type of source, and type of treatment. EPA estimates the cost to vary from $1 to $301 per household per year. The highest costs are associated with the very small public water systems where there are very few connections to spread the cost of monitoring and treatment across. Persons that own and operate a public water system may have the same cost impact as listed under "local government" above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The department agrees with the comments in the cost and compliance summaries above. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
DRINKING WATER
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Patti Fauver at the above address, by phone at 801-536-4196, by FAX at 801-536-4211, or by Internet E-mail at pfauver@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

R309. Environmental Quality, Drinking Water.
R309-110. Administration: Definitions.
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 Executive Secretary.

"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 Executive Secretary 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 fo 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 Executive Secretary 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 Division will consider 2/3 of the test pumping rate as the safe yield.

"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.

"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 Board and is also part of the Utah Department of Environmental Quality.

"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.

"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).

"Executive Secretary" means the Executive Secretary of the Board as appointed and with authority outlined in 19-4-106 of the Utah Code.

"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 verus 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 = square root of the value(550 times P divided by u 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,...., X_N is the Nth 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 Executive Secretary 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 Executive Secretary, 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 [~~(for surface water treatment systems serving at least 10,000 people only) ~~]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 Executive Secretary. 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.

"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)[~~R309-204-4(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.

"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").

"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 Executive Secretary 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 Executive Secretary, 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 wate enters the primary clarification and filtration processes in a treatment plant.

"Primary Disinfection" means the adding of an acceptable primary disinfectant 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." Acceptable primary disinfectants are, chlorine, ozone, 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.

"[~~Drinking Water~~]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.

"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 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 Executive Secretary 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.

"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 Exclosure" 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)[~~R309-204-5(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.

"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 except residual disinfection and is 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 Executive Secretary 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.

"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
Date of Enactment or Last Substantive Amendment: March 6, 2007[~~September 13, 2005~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

♦ ♦

Environmental Quality, Drinking Water
R309-150
(Changed to R309-400)
Water System Rating Criteria

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29363
FILED: 12/26/2006, 12:52

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule change is to address the changes required by the federal Long Term 1 and 2 Surface Water Treatment rules (LT1 and LT2), the Stage 2 Disinfection Byproducts rule (Stage 2), and the Improvement Priority rule (IPS). There are a total of eight amendments that address these rules (Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150). This rule adoption is necessary to maintain primacy. (DAR NOTE: The proposed amendments are as follows: Rule R309-105 under DAR No. 29369, Rule R309-110 under DAR No. 29364, Rule R309-200 under DAR No. 29371, Rule R309-210 under DAR No. 29365, Rule R309-215 under DAR No. 29366, Rule R309-220 under DAR No. 29367, Rule R309-225 under DAR No. 29368, and Rule R309-150 (changed to R309-400) under DAR No. 29363 all in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: This change incorporates the adoption of the requirements of LT1, LT2, and Stage 2 into the rating criteria. The change also renumbers the rule to follow the Division's rule numbering sequence.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-4-104

ANTICIPATED COST OR SAVINGS TO:
❖ THE STATE BUDGET: Costs for the state budget, local governments, and other persons will be based on an aggregate for the changes in Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150. The Environmental Protection Agency (EPA) estimates state costs to be $9,260,000 annually. Using the percentage of Utah systems versus the national total (approximately 1%), Utah's annual impact is approximately $92,600.
❖ LOCAL GOVERNMENTS: For this rule change, aggregate costs will vary by water system size, sources utilized, and type of treatment. EPA estimates the total national annual cost at $143,407,000. Again using the percentage of Utah systems versus the national total, Utah's systems' impact is estimated to be $1,434,070 annually.
❖ OTHER PERSONS: Other persons that own and operate a public water system may have the same cost impact as listed under "local government" above. Costs to consumers will vary depending upon the water system size. EPA estimates the cost to vary from $1 to $301 per household per year.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Aggregate compliance costs for the rule change will vary depending upon the water system size, type of source, and type of treatment. EPA estimates the cost to vary from $1 to $301 per household per year. The highest costs are associated with the very small public water systems where there are very few connections to spread the cost of monitoring and treatment across. Persons that own and operate a public water system may have the same cost impact as listed under "local government" above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The Department of Environmental Quality agrees with the comments in the cost and compliance summaries above. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:
ENVIRONMENTAL QUALITY
DRINKING WATER

150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Patti Fauver at the above address, by phone at 801-536-4196, by FAX at 801-536-4211, or by Internet E-mail at pfauver@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

R309. Environmental Quality, Drinking Water.
R309-400.[~~R309-150.~~] Water System Rating Criteria.
R309-400-1.[~~R309-150-1.~~] 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[~~R309-101 through R309-113 and R309-301~~] through R309-705[~~R309-302~~] hereinafter referred to as Rules.

R309-400-2.[~~R309-150-2.~~] Extent of Coverage.

These rules shall apply to all public water systems as defined in R309-100[~~R309-101~~].

R309-400-3.[~~R309-150-3.~~] Definitions.

Approved - means that the public water system is operating in substantial compliance with all the Rules as measured by this rule.

Board - means the Drinking Water Board.

Community Water System - means a public water system which serves at least fifteen service connections used by year-round residents or regularly serves at least twenty-five year-round residents.

Contaminant - means any physical, chemical, biological, or radiological substance or matter in water.

Corrective Action - means a provisional rating for a public water system not in compliance with the Rules, but making all the necessary changes outlined by the Executive Secretary to bring them into compliance.

Executive Secretary - means the Executive Secretary of the Drinking Water Board.

Major Bacteriological Routine Monitoring Violation- means that no routine bacteriological sample was taken as required by R309-210-5(1).[~~R309-104-4.6.1.~~]

Major Bacteriological Repeat Monitoring Violation - means that no repeat bacteriological sample was taken as required by R309-210-5(2)(a).[~~R309-104-4.6.2.~~]

Major Chemical Monitoring Violation - means that no initial background chemical sample was taken as required in R309-515-4(5).[~~R309-106-3(1)(b).~~]

Maximum Contaminant Level (MCL) - The maximum permissible level of a contaminant in water which is delivered to any user of a public water system. Individual maximum contaminant levels (MCLs) are listed in R309-200.[~~R309-103.~~]

Minor Bacteriological Routine Monitoring Violation- means that not all of the routine bacteriological samples were taken as required by R309-210-5(1).[~~R309-104-4.6.1.~~]

Minor Bacteriological Repeat Monitoring Violation - means that not all of the repeat bacteriological samples were taken as required by R309-210-5(2)(a).[~~R309-104-4.6.2.~~]

Minor Chemical Monitoring Violation - means that the required chemical sample(s) was not taken in accordance with R309-205, 210 or 215.[~~R309-104-4.~~]

Non-Community Water System - means a public water system that is not a community water system or a non-transient non-community water system.

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.

Not Approved - means the water system does not fully comply with the Rules as measured by this rule.

Public Water System - means a system, either publicly or privately owned, providing water for human consumption and other domestic uses which has at least fifteen service connections, or regularly serves an average of at least twenty-five individuals for at least sixty days out of the year. Such term includes collection, treatment, storage and 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 system but not under such control.

Routine Chemical Monitoring Violation - means no routine chemical sample(s) was taken as required in R309-205, 210 or 215.[~~R309-104-4.~~]

Sanitary Seal - A cap that prevents contaminants from entering a well through the top of the casing.

Shall - means that a particular action is obliged and has to be accomplished.[

~~Unregulated Contaminant - A known or suspected disease causing contaminant for which no maximum contaminant level has been established.~~]

R309-400-4.[~~R309-150-4.~~] Water System Ratings.

(1) The Executive Secretary 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 Not Approved and Corrective Action rated water systems for each violation of these requirements (R309-100[~~R309-101 through R309-113 and R309-301~~] through R309-705[~~R309-302~~]) as the requirements apply to each individual water system. The number of points that shall be assessed are outlined in the following sections of this rule. The number of points represent 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary. The appropriate water system rating shall then be adjusted to reflect the current point total.

(5) The Executive Secretary 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 to the Drinking Water Board by filing a request for a hearing with the Executive Secretary. The Executive Secretary shall place this matter on the agenda of the next regular meeting and so inform the appellant. The request for a hearing must be received by the Executive Secretary at least 14 calendar days prior to a scheduled Board meeting in order to be placed on the Board's agenda.

R309-400-5.[~~R309-150-5.~~] Quality, Monitoring and Public Notification Violations.

(1) Bacteriologic: All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5(6)[~~R309-103.2.6~~]; or the monitoring requirements in R309-210-5[~~R309-104-4.6~~]; and the associated public notification requirements in R309-220[~~R309-104-7~~]. The bacteriological assessments 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.

(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)[~~R309-104-4.6.2.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)[~~R309-103-2.7.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)[~~R309-103-2.7.b.~~]) 50 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.

(2) Chemical: All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5[~~R309-103.2~~]; or the monitoring requirements in R309-205, 210 and 215[~~R309-104-4~~]; and the associated public notification requirements in R309-220[~~R309-104-7~~]. 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 Executive Secretary.

(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 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 nitrate 50 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) [~~Unregulated Organics:~~

~~(i) For each routine chemical monitoring violation for unregulated contaminants 5 points shall be assessed. For each failure to perform the associated public notification 1 point shall be assessed.~~

~~(j)~~]Disinfection Byproducts:

(i) Total Trihalomethanes:

(A)[~~(i)~~] 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)[~~(ii)~~] 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. 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.

(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.

(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 which 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 which 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 which 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 which 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.

(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) [~~Plant Operation: Based upon the following criteria (a. through d.) 20 to 150 points shall be assessed as appropriate to indicate the threat to public health. For the associated failure to perform public notification 1 to 10 points shall be assessed. The surface water treatment assessments shall be updated on a monthly basis with the total number of points reflecting the most recent twelve month period.~~

~~(A) Number of events where disinfectant level in water entering the distribution system is less than 0.2 milligrams per liter for more than 4 hours; or~~

~~(B) Number of events where turbidity exceeds 5 NTU; or~~

~~(C) Each month where the percentage of turbidity interpretations meeting the treatment plant limit is less than 95 percent; or~~

~~(D) Each month where the percentage of distribution sampling violations for detectable levels of disinfectant is greater than 5 percent.~~

~~(ii)~~]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 it's equivalent within 18 months of notification shall be assessed 150 points.[~~20 to 50 points based upon the degree and seasonality of the surface water influence.~~] 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 twelve month period.

(A) Turbidity:

(I) For each turbidity exceedance which 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 which 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 which 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 which 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.[~~R309-150-6.~~] 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.[~~R309-113 and R309-200 through R309-211.~~] These points shall be assessed and updated upon notification of the Executive Secretary and shall remain until the violation or deficiency no longer exists.

(1) New Source Approval:

(a) Use of an unapproved source shall be assessed 150 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.

(b) Where no facilities exist for release (wasting) of less desirable water held in storage 2 points shall be assessed.

(c) Where the diversion facilities do not minimize frazil ice formation by holding intake velocities to less than 0.5 feet per second 2 points shall be assessed.

(d) Where diversion facilities are not adequately protected from damage by ice buildup 2 points shall be assessed.

(e) Where diversion facilities are not capable of keeping large quantities of fish or debris from entering the intake 2 points shall be assessed.

(f) Where reservoirs have not had brush and trees removed to the high water level 2 points shall be assessed.

(g) Where reservoir watershed management has not provided adequate precautions to limit nutrient loading 10 points shall be assessed.

(3) Well Sources

(a) For each well which is not equipped with a sanitary seal, or has any unsealed opening into the well casing 50 points shall be assessed.

(b) For each well which does not utilize food grade mineral oil for pump lubrication 25 points shall be assessed.

(c) For each well casing which does not terminate at least 12 inches above the pumphouse floor, 18 inches above ground, and/or five feet above the highest flood elevation and is subject to flooding 20 points shall be assessed.

(d) For each well fitted with a pitless adaptor that does not maintain a water tight seal throughout shall be assessed 50 points.

(e) For each wellhead that is not properly secured 20 points shall be assessed.

(f) For each well that is equipped with a pump to waste line that does not discharge though an approved air gap shall be assessed 20 points.

(g) For each well that is equipped with a pump to waste line that is not properly screened shall be assessed 5 points.

(h) For each well that is equipped with a pump to waste line that discharges to a receptacle without local authorization shall be assessed 2 points.

(i) For each well that does not have a means to measure drawdown 1 point shall be assessed.[~~, or is not fitted with an acceptable pitless adaptor 1 to 20 points shall be assessed based upon whether the adjacent land slopes toward or away from the wellhead; the integrity of the cement surrounding the wellhead and other factors that would jeopardize the integrity of the wellhead seal.~~]

(j)[~~(d)~~] For each well casing vent which is not properly covered with a No. 14 mesh screen 2[~~5~~] points shall be assessed.

(k) For each well casing vent which is not properly turned down 2 points shall be assessed.

(l) For each well casing vent which does not discharge through a proper air gap 2 points shall be assessed.

(m)[~~(e)~~] For each well which has discharge piping that is not properly equipped with 1) a smooth nosed sampling tap 2) check valve 3) pressure gauge 4) means of measuring flow and 5) shutoff valve 1 point[~~to 5 points~~] shall be assessed for each component not present.[~~depending upon the number of the above components that are present.~~]

(n)[~~(f)~~] For each well where there is no means to release trapped air from the discharge piping 6[~~5~~] points shall be assessed.

(o)[~~(g)~~] For each well house which does not have a drain-to-daylight installed 5 points shall be assessed.

(p) For each well which has a cross connection present in the discharge piping 5 points shall be assessed.

(q) For each well which has discharge piping equipped with an air vacuum relief valve which is not screened 2 points shall be assessed.

(r) For each well which has discharge piping equipped with an air vacuum relief valve which is not properly turned down 2 points shall be assessed.

(s) For each well which has discharge piping equipped with an air vacuum relief valve which does not discharge through an approved air gap 2 points shall be assessed.

(t) For each well which 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 which allows surface water to stand or pond upon the spring collection area (within 50 feet from collection devices) 10 or[~~to~~] 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.

(b) For each spring area which does not have a minimum of ten feet of relative impervious soil or an acceptable liner 10 points shall be assessed.

(c) For each spring area that has deep rooted vegetation within the fenced collection area 10 points shall be assessed.

(d) For each spring area that has deep rooted vegetation interfering with the spring collection 10 points shall be assessed.

(e) For each spring with a spring collection/junction box which does not have a proper[~~collection junction box; and does not have the following: a proper~~] shoebox lid[~~, gasket~~] shall be assessed 5 points.

(f) For each spring with a spring collection/junction box which does not have a proper gasket on the lid shall be assessed 5 points.

(g) For each spring with a spring collection/junction box which lacks an adequate air vent 5 points shall be assessed.

(h) For each spring with a spring collection/junction box with a vent that is not properly screened shall be assessed 2 points.

(i) For each spring with a spring collection/junction box with a vent that is not properly down turned shall be assessed 2 points.

(j) For each spring with a spring collection/junction box with a vent that is not properly air gapped shall be assessed 2 points.

(k) For each spring with a spring collection/junction box that lacks a raised access entry shall be assessed 5 points.

(l) For each spring with a spring collection/junction box which is not secured against unauthorized access shall be assessed 20 points.[~~, No. 14 mesh screen on the vent line and lock; 1 to 25 points shall be assessed. The number of points shall be determined by the number of the above items that are present.~~]

(m)[~~(f)~~] For each spring collection area without a proper fence (unless the spring is located in a remote area where no grazing or public access is possible as specified in R309-515-7(7)(e)[~~R309-106(5)(e)~~] 10 points shall be assessed.

(n)[~~(g)~~] For each spring collection area that does not have a diversion channel capable of diverting surface water away from the collection area 5 points shall be assessed.

(o)[~~(h)~~] For each spring system which does not have a permanent flow measuring device 5 points shall be assessed.

(p)[~~(i)~~] For each spring area with an overflow/drain that is not properly screened with a No. 4 mesh screen 5 points shall be assessed.

(q) For each spring collection/junction box that[~~or~~] does not have adequate freefall (12 to 24 inches) between the drain invert and the surrounding ground 5[~~ to 10~~] points shall be assessed.[~~ The number of points shall be based upon the presence of a screen and the slope of the ground surrounding the overflow/drain outlet.~~]

(r) For each spring collection/junction box that has any unsealed opening(s) 50 points shall be assessed.

(5) Pump Stations.

(a) For a pumping facility which does not have a positive-acting check valve between the pump and the isolation valve 1 point shall be assessed. R309-540-5(6)(a).

(b) For a pumping facility which does not have a standard pressure gauge on the discharge line 1 point shall be assessed. R309-540-5(6)(c)(i).

(c) For a pumping facility which does not have a flow measuring device on the discharge piping 1 point shall be assessed. R309-540-5(6)(c)(iii).

(d) For a pumping facility which does not have isolation valve(s) on the discharge piping 1 point shall be assessed. R309-540-5(6)(a).

(e) For a pumping facility which does not have isolation valve(s) on the suction side of each pump 1 point shall be assessed. R309-540-5(6)(a).

(f) For a pumping facility without adequate drainage 5 points shall be assessed. R309-540-5(2)(a) (v) and (vi).

(g) For a pumping facility where the discharge line from the air release valve is not properly screened with number 14 non-corrodible mesh screen 2 points shall be assessed. R309-550-6(6)(a).

(h) For a pumping facility where the discharge line from the air release valve is not properly air gapped 2 points shall be assessed. R309-550-6(6)(a).

(i) For a pumping facility where the discharge line from the air release valve is not properly down-turned 2 points shall be assessed. R309-550-6(6)(a).

(j) For a pumping facility where the building and equipment is not protected from flooding 5 points shall be assessed. R309-540-5(2)(a)(ii), (iii) and (iv).

(k) 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).

(l) For a pumping facility where there are cross connections present 5 points shall be assessed. R309-540-5(2)(h).

(m) For a pumping facility which does not have at least two equal and functioning pumping units 20 points shall be assessed. R309-540-5(4)(b).

(n) For a pumping facility which cannot meet the demand when the largest pumping unit is out of service 20 points shall be assessed. R309-540-5(4)(b).

(o) For a pumping facility which utilizes oil lubrication not suitable for human consumption 25 points shall be assessed. R309-105-10(7).

(p) For a pumping facility which does not have protective guards on rotating and electrical equipment 2 points shall be assessed. R309-545-19(1).

(q) For a pumping facility which does not have an air release valve or other means to release trapped air located on the pump discharge piping 6 points shall be assessed. R309-515-6(12)(e)(v).

(r) For a pumping facility which is not secured against unauthorized access shall be assessed 20 points.

(6) Hydropneumatic pressure tanks.

(a) For a pressure tank without at least two pumping units 20 points shall be assessed. R309-540-6(5).

(b) For a pressure tank without a bypass piping to permit operation of the system while it is being repaired or painted 2 points shall be assessed. R309-540-6(4).

(c) For a pressure tank which lacks a 24 inch access manhole where applicable 1 point shall be assessed. R309-540-6(6).

(d) For a pressure tank which lacks a drain 1 point shall be assessed. R309-540-6(6).

(e) For a pressure tank which lacks a pressure gauge 1 point shall be assessed. R309-540-6(6).

(f) For a pressure tank which lacks a water sight glass where applicable 1 point shall be assessed. R309-540-6(6).

(g) For a pressure tank which lacks automatic or manual air blow-off 1 point shall be assessed. R309-540-6(6).

(h) For a pressure tank which lacks a means to add air 1 point shall be assessed. R309-540-6(6).

(i) For a pressure tank which lacks pressure operated start-stop controls for the pump(s) 1 point shall be assessed. R309-540-6(6).

(j) 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).

(k) For a pressure tank and controls that are not secured against unauthorized access 20 points shall be assessed. R309-545-14(3).

[~~(5) Disinfection by gaseous chlorine:~~

~~(a) A chlorinated water system that does not maintain a detectable chlorine residual throughout the distribution system shall be assessed 10 points.~~

~~(b) An improperly heated, lighted, and vented chlorinator building shall be assessed 2 points.~~

~~(c) A chlorinated water system that does not have a test kit to measure chlorine residual shall be assessed 2 points.~~

~~(d) A chlorinated water system that does not have a cylinder wrench located on the yoke valve shall be assessed 2 points.~~

~~(e) A chlorinated water system that utilizes one ton cylinders and does not have proper chlorine leak detection and repair kit equipment shall be assessed 15 points.~~

~~(f) A chlorinated water system that utilizes 150 pound cylinders and does not have proper chlorine leak detection and repair kit equipment shall be assessed 2 points.~~

~~(g) A chlorinated water system that does not have chlorine cylinders properly restrained or isolated from operating areas shall be assessed 2 points.~~

~~(h) A chlorinated water system that does not have a feeder vent properly vented to the outside and screened with a No. 14 mesh screen shall be assessed 2 points.~~

~~(i) A chlorinated water system without means to measure chlorine feed and cylinder usage shall be assessed 2 points.~~

~~(j) A chlorinated water system without access to a properly stored gas mask or stores a gas mask in the same room where chlorine gas is handled shall be assessed 5 points.~~

~~(k) A chlorination station without a means of measuring the volume of water treated shall be assessed 2 points.~~

~~(6) Disinfection by liquid hypochlorite:~~

~~(a) A chlorinated water system that does not maintain a detectable chlorine residual throughout the distribution system shall be assessed 10 points.~~

~~(b) An improperly housed and secured hypochlorinator station shall be assessed 2 points.~~

~~(c) A chlorinated water system that does not have a test kit to measure chlorine residual shall be assessed 2 points.~~

~~(d) A chlorinated water system that does not maintain a spare parts repair kit for the positive displacement pumps shall be assessed 2 points.~~

~~(e) A hypochlorination station without a means of measuring the volume of water treated shall be assessed 2 points.~~]

(7) Storage:

(a) A water system with an uncovered finished water storage reservoir shall immediately be assessed a rating of not approved.

(b) For each storage reservoir cover that is not sloped so water will drain 10 points shall be assessed.

(c) For each storage reservoir that does not have an access opening 9 points shall be assessed.

(d) For each storage reservoir access that does not have a shoebox type lid with a minimum of a 2 inch overlap 3 points shall be assessed.

(e) For each storage reservoir access that lacks a proper gasket 3 points shall be assessed.

(f) For each storage reservoir access that lacks a minimum rise of 4 inches above the tank roof (18 inches above an earthen cover) 3 points shall be assessed.[~~access that is not an overlapping (shoe box) type lid, locked and is at least 4 inches above the top of the tank 10 points shall be assessed.~~]

(g)[~~(c)~~] For each storage reservoir that is not vented 6 points shall be assessed.

(h) For each storage reservoir vent that is not turned down or covered from rain and dust 2 points shall be assessed.

(i) For each storage reservoir vent that does not terminate a minimum of 24 to 36 inches above the surface of the storage tank roof 2 points shall be assessed.

(j) For each storage reservoir vent that is not screened with number 14 non-corrodible mesh screen with a larger guage protection screen 2 points shall be assessed.[~~improperly vented storage reservoir 5 points shall be assessed.~~]

[~~(d)~~](k) For each storage reservoir that lacks a overflow 15 points shall be assessed.

(l) For each storage reservoir overflow that does not terminated 12 to 24 inches above the ground 5 points shall be assessed.

(m) For each storage reservoir overflow that is not screened with number 4 non-corrodible mesh screen 5 points shall be assessed.

(n) For each storage reservoir overflow that[~~: is not properly screened, is not sloped for drainage, or~~]is connected to a sewer without an appropriate air gap 5 points shall be assessed.[~~; 5 to 15 points shall be assessed based on the number and severity of the above items that are present.~~]

(o) For each storage reservoir with a drain that is not properly screened 5 points shall be assessed.

(p) For each storage reservoir with a drain that does not discharge through a physical airgap of at least 2 pipe diameters 5 points shall be assessed.

(q)[~~(e)~~] For each storage reservoir with inadequate or improper means of site drainage 5[~~2~~] points shall be assessed.

(r) For each storage reservoir with any unsealed roof penetrations 50 points shall be assessed.

(s)[~~(f)~~] For each storage reservoir where the roof and sidewalls are not water tight shall be assessed 10 to 50 points based upon the size and number of cracks, the loss of structural integrity and the access of contamination to the drinking water.

(t)[~~(g)~~] For each storage reservoir without an access ladder, ladder guards, balcony railings or safely located entrance hatches [~~or railing where required (elevated tank)~~]2 points shall be assessed.

(u)[~~(h)~~] For each storage reservoir with internal coatings not in compliance with ANSI/NSF standard 61 30 points shall be assessed.

(v) For a storage facility which is not secured against unauthorized access shall be assessed 20 points.

(8) Distribution System:

(a) A water system which fails to provide at least the water pressure as required in R309-105-9 at all times and at all locations within the distribution system shall be assessed 50 points.

(b) A water system using unapproved pipe and materials shall be assessed 30 points.

(c) A water system with pipelines installed improperly without adequate clearance or separation from sewer lines shall be assessed 30 points.

(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 which are directly connected to a sewer or do not have a proper air gap shall be assessed 20 points.

(g) A water system that does not properly follow the AWWA disinfection standards as adopted in R309-105-10(2) & (3) shall be assessed 10 points.

(h) A water system that is required to provide fire protection or supplies fire hydrants with water mains that are less than 8 inched in diameter shall be assessed 5 points. These points will only be assessed for water mains installed after 1995.

(i) For each air vacuum release valve which is not properly screened and turned down 10[~~2~~] points shall be assessed.[~~up to a maximum of 20 points per system.~~]

(j) For each air vacuum release valve where the discharge piping does not extend a proper distance above the ground and flood level 10 points shall be assessed.

(k) For each air vacuum release valve chamber without a drain or adequate sump 30 points shall be assessed.

(l) For each air vacuum release valve chamber which shows evidence of flooding 30 points shall be assessed.

(m) For each air vacuum release valve chamber which is flooded at the time of inspection 50 points shall be assessed.[

~~(e) For each flooded air vacuum release valve chamber 20 points shall be assessed up to a maximum of 50 points per system.~~]

(9) Quantity requirements

(a) A water system which does not have sufficient source capacity to meet peak daily and average yearly flow requirements shall be assessed from 10[~~5~~] to 50 points. 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.

(b) A water system which does not have sufficient storage capacity to meet average daily flow requirements shall be assessed from 10[~~5~~] to 50 points. The number of points shall be based upon the severity of the shortage including the number of times and duration of water outages.

R309-400-7. Treatment Processes.

(1) General Treatment.

(a) For a treatment facility with chemical feeders and pumps that operate at lower than 20 percent of the feed range 2 points shall be assessed. R309-525-11(7)(a)(viii).

(b) For a treatment facility without anti-siphon control to assure that liquid chemical solutions cannot be siphoned through solution feeders into the process units as required in R309-525-11(9)(c) 2 points shall be assessed. R309-525-11(9)(b)(ii).

(c) 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).

(d) 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).

(e) 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, 2 points shall be assessed. R309-525-11(9)(b)(iii).

(f) For a treatment facility with no spare parts available for all feeders to replace parts which are subject to wear and damage 2 points shall be assessed. R309-525-11(7)(b)(v).

(g) For a treatment facility with chemical feed rates not proportional to flows 10 points shall be assessed. R309-525-11(7)(d)(ii).

(h) For a treatment facility with liquid chemical feeders without anti-siphon protection in each feed pump 2 points shall be assessed. R309-525-11(9)(c). Tg12

(i) For a treatment facility with feed lines not protected against freezing 2 points shall be assessed. R309-525-11(8)(d)(i)(C).

(j) For a treatment facility with feed lines not made of durable, corrosion resistant material 2 points shall be assessed. R309-525-11(8)(d)(i)(A).

(k) For a treatment facility with any chemical not conducted from the feeder to the point of application in a separate conduit 2 points shall be assessed. R309-525-11(7)(a)(v).

(l) For a treatment facility where incompatible chemicals are fed, stored or handled together 2 points shall be assessed. R309-525-11(7)(a)(iv).

(m) 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(2)(a).

(n) 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).

(o) For a treatment facility without the means to accurately measure the quantities of chemicals used 2 points shall be assessed. R309-525-11(7)(a)(i).

(p) 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).

(q) 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. R309-520-10(2)(f).

(r) 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).

(s) For a treatment facility that does not have a finished water sampling tap(s) 2 points shall be assessed. R309-525-18.

(t) 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.

(u) For a surface water treatment facility that does not have continuous residual disinfection equipment to measure continuously measure the residual in mg/L entering the distribution system 20 points shall be assessed. R309-215-10(1).

(v) For a treatment facility without provisions for measuring quantities of chemical used to prepare feed solutions 50 points shall be assessed. R309-525-11(6)(b)(iii).

(w) For a treatment facility without provisions for disposing of empty bags, drums or barrels by an acceptable procedure which will minimize operator exposure to dusts 2 points shall be assessed. R309-525-11(6)(b)(ii).

(x) For a treatment facility which does not provide cross connection control on the make-up waterlines discharging to solution tanks 5 points shall be assessed. R309-525-11(9)(c)(i).

(y) For a treatment facility with 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)(A).

(z) For a treatment facility with subsurface locations for solution tanks that are not free from sources of possible contamination 2 points shall be assessed. R309-525-11(8)(b)(iv)(A).

(z1) For a treatment facility with subsurface locations for solution tanks that do not assure positive drainage for ground waters, accumulated water, chemical spills and overflows 2 points shall be assessed. R309-525-11(8)(b)(iv)(B).

(z2) For a treatment facility with a motor driven transfer pump that is not provided a liquid level limit switch and an overflow from the day tank, which will drain by gravity back into the bulk storage tank 10 points shall be assessed. R309-525-11(8)(c)(v).

(z3) For a treatment facility without adequate spill containment provisions 2 points shall be assessed. R309-525-11(6)(a)(iv)(B)(v).

(z4) 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).

(z5) For a treatment facility without a means to measure the solution level in the tank 2 points shall be assessed. R309-525-11(8)(b)(ii).

(z6) 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.

(z7) For a treatment facility that does not use of either a volumetric or gravimetric chemical feeder for dry chemicals 2 points shall be assessed. R309-525-11(7)(c)(i).

(z8) For a disinfection facility where cross connection control is not provided on the feed lines to the solution tanks 10 points shall be assessed. R309-520-10(1)(h).

(z9) For a treatment facility that does not have a means to measure water flow rate 10 points shall be assessed.

(z10) For a treatment facility where feed lines are not labeled and color coded for identification 2 points shall be assessed. R309-525-8.

(z11) For a treatment facility which is not secured against unauthorized access shall be assessed 20 points.

(2) Disinfection.

(a) For a disinfection facility without an automatic switch over of chlorine cylinders to assure continuous disinfection 2 points shall be assessed. R309-520-10(2)(a).

(b) For a disinfection facility without scales for weighing cylinders 2 points shall be assessed. R309-520-10(2)(k).

(c) For a disinfection facility without a leak repair kit for 1 ton cylinders 15 points shall be assessed. R309-520-10(2)(p).

(d) For a disinfection facility without respiratory equipment available and stored at a convenient location 5 points shall be assessed. R309-520-10(2)(o).

(e) For a disinfection facility where the chlorine gas feed and storage area is not enclosed and separated from other operating areas 2 points shall be assessed. R309-520-10(2)(i).

(f) For a disinfection facility which is not heated, lighted or ventilated as necessary to assure proper operation or the equipment and serviceability 2 points shall be assessed. R309-520-10(1)(l).

(g) For a disinfection 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. R309-520-10(2)(e) (ii).

(h) For a disinfection facility where the chlorination equipment rooms are not vented such that air inlets are through louvers near the ceiling 2 points shall be assessed. R309-520-10(2)(e) (iii).

(i) For a disinfection facility where the chlorination equipment rooms are not vented such that louvers for chlorine room air intake and exhaust facilitate airtight closure 2 points shall be assessed. R309-520-10(2)(e) (iv).

(j) For a disinfection facility where the chlorination equipment rooms are not vented such that separate switches for the fans and lights are outside of the room, at the entrance to the chlorination equipment room and protected from vandalism 2 points shall be assessed. R309-520-10(2)(e) (iv).

(k) For a disinfection 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. R309-520-10(2)(f).

(l) For a disinfection facility without a bottle of ammonium hydroxide (56%) shall be available for leak detection 2 points shall be assessed. R309-520-10(2)(p).

(m) For a disinfection facility without full and empty cylinders of chlorine gas restrained in position to prevent upset 2 points shall be assessed. R309-520-10(2)(i).

(n) For a disinfection facility with full and empty cylinders of chlorine gas stored in rooms not separated from ammonia storage 2 points shall be assessed. R309-520-10(2)(i).

(o) For a disinfection 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. R309-520-10(2)(i).

(p) For a disinfection facility 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. R309-520-10(2)(h)(ii).

(q) For a disinfection facility utilizing 1 ton cylinders without a means of leak detection available 15 points shall be assessed. R309-520-10(2)(p).

(r) For a disinfection facility without pressure gauges on the inlet and outlets of each chlorine injector 2 points shall be assessed. R309-520-10(2)(b).

(s) For a disinfection facility without cross connection control on the solution feeders into the process units as required in R309-525-11(9)(c) 5 points shall assessed. R309-525-11(9)(b)(ii).

(t) For a disinfection facility where there is no standby disinfection equipment of sufficient capacity available to replace the largest unit 10 points shall be assessed. R309-520-10(1)(k).

(u) For a disinfection facility where a leak detector is provided and not equipped with both an audible alarm and a warning light 5 points shall be assessed. R309-520-10(2)(p).

(v) For a disinfection facility where the correct reagent is not used for testing free disinfectant residual 2 points shall be assessed. R309-520-15(3).

(w) For a disinfection facility where hypochlorite liquid feeders are not a positive displacement type 10 points shall be assessed. R309-520-10(1)(b).

(x) For a treatment facility where the pre- and post-chlorination systems are not independent to prevent possible siphoning of partially treated water into the clear well 50 points shall be assessed. R309-525-11(9)(b)(iv).

(y) For a disinfection facility where each tank is not provided with a valved drain or protected against backflow in accordance with R309-11(10)(b)&(c) 2 points shall be assessed. R309-525-11(8)(b)(vii).

(z) For a disinfection facility where overflow pipes are not located where they can be readily monitored 2 points shall be assessed. R309-520-10(1)(g).

(z1) For a disinfection facility where storage and day tanks are not provided with separate vents that terminate to the outside atmosphere 2 points shall be assessed. R309-525-11(8)(b)(vi).

(z2) For a disinfection facility where a means consistent with the nature of the chemical solution is not provided in a day tank to maintain a uniform strength of solution 2 points shall be assessed. R309-525-11(d)(8)(c)(iv).

(z3) For a disinfection facility where any chemical is not conducted from the feeder to the point of application in separate conduit 2 points shall be assessed. R309-525-11(7)(a)(v).

(z4) For a disinfection facility where chemical solution tanks are not kept covered 2 points shall be assessed. R309-525-11(8)(b)(iii).

(z5) For a disinfection facility without disinfectant residual test equipment 2 points shall be assessed. R309-520-10(1)(j).

(z6) For a disinfection facility where there is no means to measure the volume of water treated 2 points shall be assessed. R309-520-10(1)(i).

(z7) For a disinfection facility where provisions are not made for proper storage of sodium chlorite to eliminate any danger of explosion 2 points shall be assessed. R309-525-11(11) (b)(i).

(z8) For a disinfection facility where sodium chlorite is not stored by itself in a separate room and away from organic materials which would react violently with sodium chlorite 2 points shall be assessed. R309-525-11(11) (b)(i)(A).

(z9) For a disinfection facility where sodium chlorite storage structures are not constructed of noncombustible materials 2 points shall be assessed. R309-525-11(11)(a)(b)(i)(B).

(z10) For a disinfection facility where 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. R309-525-11(11) (b)(i)(C).

(3) Fluoridation.

(a) 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(2)(a).

(b) For a fluoridation facility where there is not a fail-safe device incorporated in the fluoride feed control system to prevent overfeeding fluoride 30 points shall be assessed. R309-535-5(3).

(c) For a fluoridation facility that uses sodium fluoride, sodium silicofluoride and fluoriosilicic acid that does not conform to the applicable AWWA standards or with ANSI/NSF Standard 60 25 points shall be assessed. R309-535-5.

(d) For a fluoridation facility where liquid chemical storage tanks are not equipped with an inverted "J" air vent 2 points shall be assessed. R309-525-11(6)(a)(iv)(c).

(e) For a fluoridation facility where the make-up water is not properly treated for hardness 2 points shall be assessed. R309-535-5(2)(i).

(f) For a fluoridation facility with no 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.

(g) For a fluoridation facility without a spring opposed diaphragm type anti-siphon device shall be provided for all fluoride feed lines and dilution water lines 10 points shall be assessed. R309-535-5(2)(f).

(h) For a fluoridation facility with saturators that do not have a flowmeter on the inlet or outlet line 2 points shall be assessed. R309-535-5(2)(l).

(i) For a fluoridation facility without an adequate level of fluoride crystals in the saturator 2 points shall be assessed. R309-525-11(d)(8)(b)(i).

(j) For a fluoridation facility without NIOSH/MSHA certified dust respirator approved for fluoride dust removal as required in R309-525-11(10) for operators handling fluoride compounds 2 points shall be assessed. R309-535-5(4).

(k) 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).

(l) For a fluoridation facility without deluge showers and eye wash devices 2 points shall be assessed. R309-535-5(4).

(m) For a fluoridation facility without proper personal protective equipment as required in R309-525-11(10) for operators handling fluoride compounds 2 points shall be assessed. R309-535-5(4).

(n) 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).

(o) For a fluoridation facility where the saturators are not of the up-flow type 2 points shall be assessed. R309-535-5(2)(l).

(4) Activated Carbon.

(a) For a treatment facility that does not periodically check media depth against design standards 10 points shall be assessed. R309-525-19.

(b) For a treatment facility that does not have a standard operating practice for the backwash procedure 10 points shall be assessed. R309-525-19.

(c) For a treatment facility that does not provide cross connection control for the in-plant water supply 2 points shall be assessed. R309-525-11(9)(b).

(d) For a treatment facility where the output of any chemical pump is inadequate to supply the required dose rate 2 points shall be assessed. R309-525-11(7)(a)(i).

(e) For a treatment facility where the in plant water supply is inadequate in pressure and quantity 2 points shall be assessed. R309-525-11(9)(a).

(f) For a treatment facility where the vents from feeders, storage facilities and equipment exhaust does not discharge to the outside atmosphere above grade and does not have the end covered with #14 non-corrodible mesh screen 2 points shall be assessed. R309-520-10(2)(f).

(5) 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 filtration facility that does not provide a minimum backwash rate of 15 gpm/sf for conventional filters 50 points shall be assessed.

(c) For a 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) 50 points shall be assessed.

R309-400-8.[~~R309-150-7.~~] Operator Certification.

[~~Operator certification:~~

~~—~~](1) A water system that is required to have a certified operator and does not shall be assessed 30 points.

(2) A water system where the operator is not certified at the appropriate level shall be assessed 10 points.

(3) A grade 3 or 4 water system that does not have all direct responsible charge operators (as specified in R309-300-5(5)[~~R309-301-5~~]) certified at [~~no more than one grade level below.~~]the level of the system shall be assessed 5 to 15 points. 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 shall be assessed 20 points.

(5)[~~(4)~~] 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 or backflow prevention certification, shall be credited 10 points.

R309-400-9.[~~R309-150-8.~~] Cross Connection Control Program.

[~~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 shall be assessed 50 points.

(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 (i.e., ordinance, bylaw or policy) shall be assessed 10 points.

(b) A water system that does not provided public education or awareness material or presentations on an annual basis shall be assessed 10 points.

(c) A water system that does not have an operator with training in the area of cross connection control or backflow prevention shall be assessed 10 points.

(d) A water system with no written records of cross connection control activities, such as, backflow assembly inventory and test history, shall be assessed 10 points.

(e) A water system that does not have on-going enforcement activities (hazard assessments and enforcement actions) shall be assessed 10 points.

R309-400-10.[~~R309-150-9.~~] Drinking Water Source Protection.

Drinking water source protection (for ground water and surface water sources[~~well, spring or tunnel~~]): Points shall be assessed for each source after a system fails to complete source protection plans as specified in R309-600 and R309-605.[~~R309-113.~~] The points shall remain until such time as the violation or deficiency no longer exists.[~~source protection plan is completed and concurred with.~~]

(1) For [~~each~~]a water system which has not appointed a designated person for source protection and notified the Division 5 points shall be assessed.

(2) For a water system which does not maintain a current copy of their source protection plan(s) or source assessment(s) on the water system premises 30 points shall be assessed.

(3) For a water system which does not maintain a current inventory of potential contamination sources or susceptibility analysis and determination 10 points shall be assessed.

(4) For a water system which does not maintain current records of land management strategies (such as, ordinances, codes, permits, public education programs, meeting minutes) 10 points shall be assessed.

(5) For a water system with any new 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 in addition to.

(6) For a water system which has any old sources that have come into use for which a source protection plan has not been submitted 30 points shall be assessed.

(7) For a water system which has reconstructed or redeveloped a water source and has not submitted a revised source protection plan 20 points shall be assessed.[~~groundwater source for which a protection area has not been delineated shall be assessed 5 points.~~

~~(2) For each groundwater source for which there is no inventory of potential contamination sources 5 points shall be assessed.~~

~~(3) For each groundwater source for which potential contamination sources assessed are not adequately controlled 5 points shall be assessed.~~

~~(4) For each groundwater source where there is not a plan to address any new potential contamination sources that may be located in protection areas shall be assessed 5 points.~~

~~(5) For each water system that completes a source protection plan prior to the required deadline in R309-113, the system shall receive a credit of 20 points that shall remain on record until the deadline requiring a plan for the system's source(s) passes.~~]

R309-400-11.[~~R309-150-10.~~] Administrative Issues.

Points in this area shall be assessed at the time that the failure occurs or upon notification of the Executive Secretary and shall remain until the issue is resolved unless otherwise specified.

(1) Administrative Data -

(a) A water system which has not designated a person or organizational official responsible for the system including a current address and phone number shall be assessed 10 points.

(b) A water system project constructed without proper plan approval shall be assessed 1 to 50 points 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). The points assessed shall remain on record for a period of one year.

(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 shall be assessed 5 points.

(b) A water system which does not have a lead/copper sampling site plan shall be assessed 10 points.

(5) Customer Complaint:

(a) 1 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 Executive Secretary and shall remain on record until the issue or deficiency no longer exists. Points may have already been assessed in other areas as appropriate.

(6) Agency Directives - When a directive consistent with the authority of the Drinking Water Board is not complied with 1 to 100 points may be assessed to a water system. Agency directives include but are not limited to the following:

(a) Administrative Orders;

(b) Rule defined action;

(c) Rule defined compliance schedule;

(d) Variance/Exemption requirements; and

(e) Bilateral Compliance Agreement.

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 Executive Secretary may assess a water system points for data falsification. The water system may be assessed 1 to 50 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 Executive Secretary includes but is not limited to Water Treatment Plant Reports, Disinfection[~~Chlorination~~] Reports, bacteriological and chemical analyses, and Annual Reports.

(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.

(b) For a non-community system that is hauling water as a permanent method of culinary water distribution when there is alternate means of supplying quality drinking water 150 points shall be assessed.

(c) For a water system which has been granted an exception to haul water, if any part of the water hauling guidelines are not followed 50 points shall be assessed.

R309-400-12.[~~R309-150-11.~~] Reporting and Record Maintenance Issues.

Points may be assessed for failure to provide required reports to the Executive Secretary 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 10 points shall be assessed.

(2) Quarterly Repots:

(a)[~~(b)~~] For each failure to report the quarterly disinfection[~~monthly chlorination~~] report 10 points shall be assessed.

(3)[~~(2)~~] Annual Reports[~~–~~]:

(a) For failure to provide the annual report 2 points shall be assessed.

(b) For a community water system that fails to prepare or distribute a consumer confidence report as required in R309-225 2 points shall be assessed.

KEY: drinking water, environmental protection, water system rating, administrative procedures
Date of Enactment or Last Substantive Amendment: March 6, 2007[~~March 8, 2006~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

♦ ♦

Environmental Quality, Drinking Water
R309-200
Monitoring and Water Quality: Drinking Water Standards

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29371
FILED: 12/26/2006, 13:08

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule change is to address the changes required by the federal Long Term 1 and 2 Surface Water Treatment rules (LT1 and LT2), the Stage 2 Disinfection Byproducts rule (Stage 2), and the Improvement Priority rule (IPS). There are a total of eight amendments that address these rules (Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150). This rule adoption is necessary to maintain primacy. (DAR NOTE: The proposed amendments are as follows: Rule R309-105 under DAR No. 29369, Rule R309-110 under DAR No. 29364, Rule R309-200 under DAR No. 29371, Rule R309-210 under DAR No. 29365, Rule R309-215 under DAR No. 29366, Rule R309-220 under DAR No. 29367, Rule R309-225 under DAR No. 29368, and Rule R309-150 (changed to R309-400) under DAR No. 29363 all in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: This amendment makes changes to incorporate the transition from Stage 1 to Stage 2 disinfection byproducts compliance protocols and the addition of small surface water systems to lowered turbidity standards.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-4-104, and 40 CFR 141, subparts T, W, L, U, and V

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Costs for the state budget, local governments, and other persons will be based on an aggregate for the changes in Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150. The Environmental Protection Agency (EPA) estimates state costs to be $9,260,000 annually. Using the percentage of Utah systems versus the national total (approximately 1%), Utah's annual impact is approximately $92,600.

❖ LOCAL GOVERNMENTS: For this rule change, aggregate costs will vary by water system size, sources utilized, and type of treatment. EPA estimates the total national annual cost at $143,407,000. Again using the percentage of Utah systems versus the national total, Utah's systems' impact is estimated to be $1,434,070 annually.

❖ OTHER PERSONS: Other persons that own and operate a public water system may have the same cost impact as listed under "local government" above. Costs to consumers will vary depending upon the water system size. EPA estimates the cost to vary from $1 to $301 per household per year.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Aggregate compliance costs for the rule change will vary depending upon the water system size, type of source, and type of treatment. EPA estimates the cost to vary from $1 to $301 per household per year. The highest costs are associated with the very small public water systems where there are very few connections to spread the cost of monitoring and treatment across. Persons that own and operate a public water system may have the same cost impact as listed under "local government" above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The Department of Environmental Quality agrees with the comments in the cost and compliance summaries above. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
DRINKING WATER

150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Patti Fauver at the above address, by phone at 801-536-4196, by FAX at 801-536-4211, or by Internet E-mail at pfauver@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

R309. Environmental Quality, Drinking Water.
R309-200. Monitoring and Water Quality: Drinking Water Standards.
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 63-46a of[~~fo~~] the same, known as the Administrative Rulemaking Act.

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, 2006[~~2004~~] by the Office of the Federal Register.

(4) Unless otherwise required by the Board, the effective dates on which new analytical methods shall be initiated are identical to the dates published in 40 CFR 141 on July 1, 2006[~~2004~~] 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.

. . . . . .

(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.

. . . . . .

(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. [~~Community water systems utilizing only groundwater sources serving 10,000 persons or more shall monitor in accordance with R309-210-9 and meet the MCL listed in paragraph (vii) of this section until December 31, 2003.~~]

(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)

(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 Executive Secretary 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 Executive Secretary 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.[

~~(vii) Community water systems utilizing only groundwater sources serving 10,000 persons or more shall monitor in accordance with R309-210-9 and meet the following MCL until December 31, 2003.~~

~~(A) The running average of analyses of quenched TTHM samples for four consecutive calendar quarters shall not exceed 100 micrograms per liter.~~

~~(B) The single sample Total Trihalomethane Formation Potential (THMFP) shall not exceed 100 micrograms per liter. Approval is needed from the Executive Secretary to substitute this test for TTHM samples and may only be used for groundwater sources. Compliance for each source is based on measurement of this sample.~~]

. . . . . .

(5) TURBIDITY

(a) All public[~~Large surface~~] water systems using surface water or ground water under the direct influence of surface water[~~serving 10,000 or more population~~] 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[~~by January 1, 2002~~].

(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 Executive Secretary.

(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 Executive Secretary, 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 Executive Secretary approves the use of the filtration technology. For each approval, the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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).[

~~(b) Small surface water systems serving a population less than 10,000:~~

~~(i) The following turbidity limit applies to finished water from small surface water treatment facilities providing water to all public water systems whether community, non-transient non-community or non-community.~~

~~(ii) The limit for turbidity in drinking water from treatment facilities which utilize surface water sources or ground water sources under the direct influence of surface water is 0.5 NTU in at least 95 percent of the samples as required by R309-215-9(1)(c) for conventional complete treatment and direct filtration. If the Executive Secretary determines that the system is capable of achieving at least 99.9 percent removal and inactivation of Giardia lamblia cysts at some turbidity level higher than 0.5 NTU in at least 95 percent of the measurements, the Executive Secretary may substitute this higher turbidity limit for that system. However, in no case may the Executive Secretary approve a turbidity limit that allows more than 1.0 NTU in more than 5 percent of the samples taken each month, measured as specified in R309-215-9(1)(c) and (d).~~

~~(A) 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 Executive Secretary 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 Executive Secretary may substitute this higher turbidity limit for that system.~~

~~(B) 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) The Executive Secretary may allow the higher turbidity limits for the above treatment techniques only if the supplier of water can demonstrate to the Executive Secretary's satisfaction that the higher turbidity does not do any of the following:~~

~~(I) Interfere with disinfection;~~

~~(II) Prevent maintenance of an effective disinfectant agent throughout the distribution system;~~

~~(III) Interfere with microbiological determinations; or~~

~~(IV) Interfere with a treatment technique's ability to achieve the required log removal/inactivation of pathogens or virus as required by R309-505-6(2)(a) and (b).~~]

(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).

. . . . . .

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 [~~200-5~~]
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[~~systems~~], 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[~~. for filtered systems, or Cryptosporidium control under the watershed control plan for unfiltered systems~~].

(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.

KEY: drinking water, quality standards, regulated contaminants
Date of Enactment or Last Substantive Amendment: March 6, 2007[~~September 13, 2005~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

Environmental Quality, Drinking Water
R309-210
Monitoring and Water Quality: Distribution System Monitoring Requirements

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29365
FILED: 12/26/2006, 12:57

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule change is to address the changes required by the federal Long Term 1 and 2 Surface Water Treatment rules (LT1 and LT2), the Stage 2 Disinfection Byproducts rule (Stage 2), and the Improvement Priority rule (IPS). There are a total of eight amendments that address these rules (Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150). This rule adoption is necessary to maintain primacy. (DAR NOTE: The proposed amendments are as follows: Rule R309-105 under DAR No. 29369, Rule R309-110 under DAR No. 29364, Rule R309-200 under DAR No. 29371, Rule R309-210 under DAR No. 29365, Rule R309-215 under DAR No. 29366, Rule R309-220 under DAR No. 29367, Rule R309-225 under DAR No. 29368, and Rule R309-150 (changed to R309-400) under DAR No. 29363 all in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: This change incorporates the requirements for the Initial Distribution System Evaluation and the Stage 2 monitoring requirements.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-4-104, and 40 CFR subparts T, W, L, U and V

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Costs for the state budget, local governments, and other persons will be based on an aggregate for the changes in Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150. The Environmental Protection Agency (EPA) estimates state costs to be $9,260,000 annually. Using the percentage of Utah systems versus the national total (approximately 1%), Utah's annual impact is approximately $92,600.

❖ LOCAL GOVERNMENTS: For this rule change, aggregate costs will vary by water system size, sources utilized, and type of treatment. EPA estimates the total national annual cost at $143,407,000. Again using the percentage of Utah systems versus the national total, Utah's systems' impact is estimated to be $1,434,070 annually.

❖ OTHER PERSONS: Other persons that own and operate a public water system may have the same cost impact as listed under "local government" above. Costs to consumers will vary depending upon the water system size. EPA estimates the cost to vary from $1 to $301 per household per year.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Aggregate compliance costs for the rule change will vary depending upon the water system size, type of source, and type of treatment. EPA estimates the cost to vary from $1 to $301 per household per year. The highest costs are associated with the very small public water systems where there are very few connections to spread the cost of monitoring and treatment across. Persons that own and operate a public water system may have the same cost impact as listed under "local government" above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The Department of Environmental Quality agrees with the comments in the cost and compliance summaries above. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
DRINKING WATER
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Patti Fauver at the above address, by phone at 801-536-4196, by FAX at 801-536-4211, or by Internet E-mail at pfauver@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

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.[~~Monitoring for public water systems.~~]

R309-210-9. Disinfection Byproducts - Initial Distribution System Evaluations (IDSE).

R309-210-10. Disinfection Byproducts - Stage 2 Requirements.[~~Monitoring for community water systems with only ground water sources that serve a population of 10,000 or greater.~~]

R309-210-8. Disinfection Byproducts - Stage 1 Requirements.[~~Monitoring for Public Water Systems.~~]

(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 Executive Secretary.

(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)[~~(iv)~~] 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)[~~(iv)~~] 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 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 Executive Secretary. 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)[~~(iv)~~] 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)[~~(v)~~] The Executive Secretary 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[~~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 Executive Secretary may allow a public water system which uses both disinfected and undisinfected sources to take disinfectant residual samples at points other than the total coliform sampling points if the Executive Secretary 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 Executive Secretary 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 Executive Secretary no later than the date of the first report required under R309-105-16(2). The Executive Secretary may also require the plan to be submitted by any other system. After review, the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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; and 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 the table in this 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 Executive Secretary by or receive very small system waiver from the Executive Secretary 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 Executive Secretary 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 Executive Secretary by or receive very small system waiver from the Executive Secretary 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 Executive Secretary 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 Executive Secretary by or receive very small system waiver from the Executive Secretary 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 Executive Secretary 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 Executive Secretary by or receive very small system waiver from the Executive Secretary 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 Executive Secretary 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 Executive Secretary by or receive very small system waiver from the Executive Secretary 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 Executive Secretary 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 is required to submit the information in (i)(A)(I), (B)(I), (C)(I), (D)(I) and (ii)(A)(I) above, the Executive Secretary 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 indicated.

(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 Executive Secretary 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) of this section, the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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) 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 Executive Secretary 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 Executive Secretary 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 the table in this 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 or 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 or 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 or 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 or 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 or 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) 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 or 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.

(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) Six monitoring periods per year, dual sample sets must be taken every 60 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 or 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 or 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 or 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 Executive Secretary 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 Executive Secretary. 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 Executive Secretary modifies the R309-210-10 monitoring requirements that the water system recommended in the IDSE report or if the Executive Secretary approves alternative monitoring locations, the water system must keep a copy of the Executive Secretary's notification on file for 10 years after the date of the Executive Secretary's notification. The water system must make the IDSE report and any Executive Secretary notification available for review by the Executive Secretary 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 Executive Secretary 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 are 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 Executive Secretary 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 Executive Secretary rejects some of the data, the water system must either conduct additional monitoring to replace rejected data on a schedule the Executive Secretary 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) 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 Executive Secretary 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 Executive Secretary inquiries concerning the model. If the water system fails to correct deficiencies or respond to inquiries to the Executive Secretary'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 Executive Secretary. 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 Executive Secretary modifies the R309-210-10 monitoring requirements the water system recommended in the IDSE report or if the Executive Secretary approves alternative monitoring locations, the water system must keep a copy of the Executive Secretary's notification on file for 10 years after the date of the Executive Secretary's notification. The water system must make the IDSE report and any Executive Secretary notification available for review by the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary may require standard monitoring under R309-210-9(2) or a system specific study under R309-210-9(3).

(iii) The Executive Secretary 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 Executive Secretary notification available for review by the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 60 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 Executive Secretary 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 Executive Secretary approves another month. Once the water system have identified the peak historical month, and if the water system are 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 are 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 table 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 Executive Secretary 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 are required to conduct quarterly monitoring, the water system must begin monitoring in the first full calendar quarter that includes the compliance date in the table in this paragraph (c).

(B) If the water system are 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 are 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 are 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 Executive Secretary 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 Executive Secretary 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 are 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 Executive Secretary 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 are 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary has reduced monitoring requirements under the Executive Secretary 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 are a surface water system serving greater than 3,300 people, the water system must submit a copy of the monitoring plan to the Executive Secretary 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 Executive Secretary-approved reasons, after consultation with the Executive Secretary 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 Executive Secretary may also require modifications in the monitoring plan. If the water system are a surface water system serving greater than 3,300 people, the water system must submit a copy of the modified monitoring plan to the Executive Secretary prior to the date the water system are 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 Executive Secretary may return the system to routine monitoring at the Executive Secretary's discretion.

(5) Additional requirements for consecutive systems.

If the water system are 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 Executive Secretary, and report monitoring results under R309-105-16(2)(c).

(6) Conditions requiring increased monitoring.

(a) If the water system are 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

(b) The water system are 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 are 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 qualify 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 meet the reduced monitoring criteria in R309-210-10(4)(a), and the water system do 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 were on increased monitoring under R309-210-8(2)(a), the water system must remain on increased monitoring until the water system qualify 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 qualify 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 Executive Secretary 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 Executive Secretary as part of the first report due following the compliance date or anytime thereafter that this determination is made. If the water system are 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 are 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 Executive Secretary 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 Executive Secretary 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.**[~~Disinfection Byproducts Monitoring for Community Water Systems with only Ground Water Sources that Serve a Population of 10,000 or Greater.~~**

~~This section applies to community water system with only ground water sources that serve a population of 10,000 or greater through December 31, 2003 at which time these systems shall comply with the requirements outlined in R309-210-8.~~

~~(1) Monitoring Requirements for Total Trihalomethanes. Community water systems serving 10,000 or more people and using disinfection must sample for Total Trihalomethane. Non-transient non-community and non-community water systems are not required to monitor for total trihalomethanes. Groundwater systems may choose to monitor for Total Trihalomethane Formation Potential (THMFP) or TTHM compounds with the approval of the Executive Secretary.~~

~~(2) Sampling Locations For Trihalomethanes~~

~~(a) THMFP samples~~

~~A THMFP sample shall be collected in a representative manner at the point of entry to the distribution system following disinfection. One sample must be collected for each disinfected source in duplicate. Compliance for each source is based on measurement of this sample. If the results of this sample are well below 100 micrograms per liter, reduced monitoring can be requested of the Executive Secretary.~~

~~(b) Routine TTHM Samples~~

~~Samples shall be collected from the distribution system for routine TTHM quenched analysis and not the source. At least 25% of all samples collected representing each chlorinated source shall represent the extremes of the distribution system to which disinfected water travels. Operators are required to check for a chlorine residual before collecting any TTHM samples. A chlorine residual of at least 0.2 ppm shall be present at all sampling points.~~

~~(3) Sampling Frequency for Trihalomethanes~~

~~For TTHM samples, four samples, all collected on the same day, shall be collected each calendar quarter representing each disinfected source. All samples shall be collected in duplicate, although laboratories may only analyze one of these. This is a required quality control procedure for each certified laboratory.~~

~~For THMFP samples, only one sample need be collected (see paragraph (2) above).~~

~~(4) Reduced Sampling for Trihalomethanes~~

~~Systems with groundwater sources that have either completed a THMFP test or that have completed four consecutive calendar quarters may petition the Executive Secretary for reduced monitoring if the MCL has been met. Upon approval of reduced monitoring by the Executive Secretary, groundwater sources shall be analyzed at least once per year for TTHM compounds. Subsequent samples shall be collected from the extreme end of the distribution system. A chlorine residual of at least a detectable level shall be present at the point of sampling.~~

~~(5) Reporting of Results of Trihalomethane Monitoring~~

~~All results of TTHM samples shall be reported to the Executive Secretary within 10 days of the receipt of the analysis.~~

~~(6) Procedures if Total Trihalomethane MCL is Exceeded~~

~~(a) If the quarterly average of TTHM samples or THMFP samples exceeds 100 micrograms per liter, the Executive Secretary shall be so informed in writing within 10 days of the end of any month in which these analyses were performed.~~

~~(b) An accelerated sampling program shall be undertaken as determined by the Executive Secretary.~~

~~(c) Alteration of the existing treatment processes or installation of new processes for TTHM reduction shall be required if an MCL is not met. A compliance schedule shall be established which outlines any pilot studies necessary together with a plan and time schedule for completion of construction which will remedy the MCL violation. Modifications shall not endanger adequate disinfection of water in the system.~~

~~(d) When an MCL is violated, or is near the limit, action shall be taken by the suppliers involved. Generally, the Executive Secretary will notify the supplier of special sampling which is necessary on a case by case basis.~~

~~Two possibilities in this area are:~~

~~(i) A wholesaler-retailer relationship. In general, the burden in this case shall be on the supplier adding the disinfectant to show that the results of additional THMFP tests are well within limitations. Additional THMFP tests and TTHM tests may be required of the supplier distributing this water, but not treating it, to clarify the situation. The Executive Secretary shall decide the responsibility in these cases and send written confirmation of this finding to both suppliers involved.~~

~~(ii) A situation where not all sources on the system are disinfected, yet deliver water to the same system. In this case, the cause of non-compliance must be determined to be either a chlorinated source problem, a non-chlorinated source - chlorinated source interaction, a distribution system reaction, or other. The Executive Secretary shall require such tests as are necessary to resolve the problem.~~

~~As with any action, this decision may be appealed to the Utah Drinking Water Board.~~

~~(e) Notification of Executive Secretary and Public~~

~~When the maximum contaminant level as set forth in R309-200-5(c) is exceeded, the supplier of water shall give public notice as required in R309-220.~~]

KEY: drinking water, distribution system monitoring, compliance determinations
Date of Enactment or Last Substantive Amendment: March 6, 2007[~~December 9, 2002~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

♦ ♦

Environmental Quality, Drinking Water
R309-215
Monitoring and Water Quality: Treatment Plant Monitoring Requirements

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29366
FILED: 12/26/2006, 12:59

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule change is to address the changes required by the federal Long Term 1 and 2 Surface Water Treatment rules (LT1 and LT2), the Stage 2 Disinfection Byproducts rule (Stage 2), and the Improvement Priority rule (IPS). There are a total of eight amendments that address these rules (Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150). This rule adoption is necessary to maintain primacy. (DAR NOTE: The proposed amendments are as follows: Rule R309-105 under DAR No. 29369, Rule R309-110 under DAR No. 29364, Rule R309-200 under DAR No. 29371, Rule R309-210 under DAR No. 29365, Rule R309-215 under DAR No. 29366, Rule R309-220 under DAR No. 29367, Rule R309-225 under DAR No. 29368, and Rule R309-150 (changed to R309-400) under DAR No. 29363 all in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: This change incorporates the requirements of LT2 for bin classification monitoring and enhanced treatment for cryptosporidium. Expansion of the turbidity requirements to small surface water systems via LT1.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-4-104, and 40 CFR 141 subparts T, W, L, U and V

THIS RULE OR CHANGE INCORPORATES BY REFERENCE THE FOLLOWING MATERIAL: Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 2005, United States Environmental Protection Agency, EPA-815-R-05-002; Method 1622: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 2005, United States Environmental Protection Agency, EPA-815-R-05-001; Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 2001, United States Environmental Protection Agency, EPA-821-R-01-025; Method 1622: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 2001, United States Environmental Protection Agency, EPA-821-R-01-026; Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 1999, United States Environmental Protection Agency, EPA-821-R-99-006; and Method 1622: Cryptosporidium and Giardia in Water by Filtration/IMS/FA, 1999, United States Environmental Protection Agency, EPA-821-R-99-001

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Costs for the state budget, local governments, and other persons will be based on an aggregate for the changes in Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225 and R309-150. The Environmental Protection Agency (EPA) estimates state costs to be $9,260,000 annually. Using the percentage of Utah systems versus the national total (approximately 1%), Utah's annual impact is approximately $92,600.

❖ LOCAL GOVERNMENTS: For this rule change, aggregate costs will vary by water system size, sources utilized, and type of treatment. EPA estimates the total national annual cost at $143,407,000. Again using the percentage of Utah systems versus the national total, Utah's systems' impact is estimated to be $1,434,070 annually.

❖ OTHER PERSONS: Other persons that own and operate a public water system may have the same cost impact as listed under "local government" above. Costs to consumers will vary depending upon the water system size. EPA estimates the cost to vary from $1 to $301 per household per year.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Aggregate compliance costs for the rule change will vary depending upon the water system size, type of source, and type of treatment. EPA estimates the cost to vary from $1 to $301 per household per year. The highest costs are associated with the very small public water systems where there are very few connections to spread the cost of monitoring and treatment across. Persons that own and operate a public water system may have the same cost impact as listed under "local government" above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The Department of Environmental Quality agrees with the comments in the cost and compliance summaries above. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
DRINKING WATER
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Patti Fauver at the above address, by phone at 801-536-4196, by FAX at 801-536-4211, or by Internet E-mail at pfauver@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

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).

R309-215-9. Turbidity Monitoring and Reporting.

Public water systems utilizing surface water and ground[~~surface~~] water under the direct influence of surface water shall monitor for turbidity in accordance with [~~the~~] 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)[~~(3)~~]. Large surface water systems serving 10,000 or more population shall monitor in accordance with subsections (1), (2), (3), (4) and (6).[~~and (4).~~]

(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. 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[~~Large~~] surface water systems [~~serving 10,000 or more population~~]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 Executive Secretary may reduce the sampling frequency to as little as once per day if the Executive Secretary determines that less frequent monitoring is sufficient to indicate effective filtration performance. For systems serving 500 or fewer persons, the Executive Secretary may reduce the turbidity sampling frequency to as little as once per day, regardless of the type of filtration treatment used, if the Executive Secretary 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 Executive Secretary). 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 Executive Secretary 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 Executive Secretary -

If the repeat sample confirms that the turbidity limit has been exceeded, the supplier shall report this fact to the Executive Secretary 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[~~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[~~ beginning January 1, 2002~~]. 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.[~~ beginning January 1, 2002.~~] The reporting in paragraph (a) of this section is in lieu of the reporting specified above.

(a) Turbidity measurements, as required in[~~on~~] 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 Executive Secretary 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 Executive Secretary 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 Division or a third party approved by the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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(s),the corresponding date(s), the turbidity values which exceeded 1.0 NTU, and the cause (if known) for the exceedance(s), to the Executive Secretary by the 10th of the following month.

(ii) If a system was required to report to the Executive Secretary 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 Executive Secretary for two months in a row and turbidity exceeded 2.0 NTU in two consecutive measurements taken 15 minutes apart at the same filter, the system shall arrange to have a comprehensive performance evaluation (CPE) conducted by the Division or a third party approved by the Executive Secretary 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 Division or a third party approved by the Executive Secretary 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)[~~(c)~~] Additional reporting requirements.

(a)[~~(i)~~] 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)[~~(ii)~~] If at any time the turbidity in representative samples of filtered water exceeds the maximum level set by the Executive Secretary 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.

R309-215-13. Treatment [~~t~~]Technique for [~~c~~]Control of [~~d~~]Disinfection [~~b~~]Byproduct [~~p~~]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 $CaCO_3$), 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 Executive Secretary 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 $CaCO_3$), 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 $CaCO_3$), measured monthly according to R309-200-4(3) and calculated quarterly as an annual running average.

. . . . . .

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 must develop a disinfection profile unless the Executive Secretary determines that a system's profile is unnecessary. The Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary not later April 16, 1999. Until the Executive Secretary 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 Executive Secretary in writing of their election not later than December 31, 1999.

(v) If the system elects to request that the Executive Secretary 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 Executive Secretary 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 Executive Secretary may approve a more representative TTHM and HAA5 data set to determine these levels.

(2) Disinfection profiling.

(a) Any system that is required by[~~meets the criteria in~~] paragraph (1)[~~(f)~~] 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 CT99.9 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 ($CTcalc/CT_{99.9}$) before or at the first customer during peak hourly flow.

(B) Determine successive $CTcalc/CT_{99.9}$ 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 ($CTcalc/CT_{99.9}$) for each sequence and then adding the ($CTcalc/CT_{99.9}$) values together to determine sum of ($CTcalc/CT_{99.9}$).

(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 ($CTcalc/CT_{99.9}$) value of each segment and sum of ($CTcalc/CT_{99.9}$) 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 or ozone for primary disinfection shall also calculate the logs of inactivation for viruses using a method approved by the Executive Secretary.

(f) The system shall retain disinfection profile data in graphic form, as a spreadsheet, or in some other format acceptable to the Executive Secretary for review as part of sanitary surveys conducted by the Executive Secretary.

(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 Executive Secretary 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 Executive Secretary.

(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).[~~or ozone for primary disinfection shall also calculate the disinfection benchmark for viruses using a method approved by the Executive Secretary.~~]

(d) The system shall submit information in paragraphs (3)(d)(i) through (iv)[~~(iii)~~] of this section to the Executive Secretary 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 Executive Secretary.

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 Executive Secretary that it will monitor for Cryptosporidium as described in paragraph (a)(iv) of this section. The system must notify the Executive Secretary 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 Executive Secretary may approve monitoring for an indicator other than E. coli under paragraph (a)(ii) of this section. The Executive Secretary 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 Executive Secretary must be provided to the system in writing and must include the basis for the Executive Secretary'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 Executive Secretary 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 Executive Secretary in writing that it will provide this level of treatment. Systems must install an 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary.

(iv) Systems must submit sampling schedules for the second round of source water monitoring R309-215-15(2)(b) to the Executive Secretary.

(v) If EPA or the Executive Secretary 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)(1) or (2) 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 Executive Secretary approves an alternative sampling date. The system must submit an explanation for the delayed sampling date to the Executive Secretary 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 Executive Secretary approves an alternative resampling date. The system must submit an explanation for the delayed sampling date to the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary may approve a system to collect a source water sample after chemical treatment. To grant this approval, the Executive Secretary 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)(i)(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 Executive Secretary 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 Executive Secretary 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)(2) of this section.

(ii) The Executive Secretary 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 Executive Secretary 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) and (4).

(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 Executive Secretary.

(d) All systems must report results from the second round of source water monitoring required under R309-215-15(2)(b) to the Executive Secretary.

(e) Systems must report the applicable information in paragraphs (e)(1) and (2) 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 and the Number of oocysts counted.

(G) 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.

(H) 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.

(I) 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.

(I) 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 Executive Secretary 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 141.705.

(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 Executive Secretary may approve grandfathering of previously collected data where there are time gaps in the sampling frequency if the system conducts additional monitoring the Executive Secretary 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 Executive Secretary approves reporting to the Executive Secretary rather than EPA. Systems serving fewer than 10,000 people must report this information to the Executive Secretary.

(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)(1) 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 Executive Secretary 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 Executive Secretary may disapprove the data. Alternatively, the Executive Secretary may approve the previously collected data if the system reports additional source water monitoring data, as determined by the Executive Secretary, 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary.

(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 Executive Secretary.

(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 Executive Secretary.

(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)(1) or (2) 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 ($CTcalc/CT_{99.9}$) before or at the first customer during peak hourly flow.

(B) Determine successive $CTcalc/CT_{99.9}$ 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 ($CTcalc/CT_{99.9}$) for each sequence and then adding the ($CTcalc/CT_{99.9}$) values together to determine ($S(CTcalc/CT_{99.9})$).

(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 ($CTcalc/CT_{99.9}$) value of each segment and ($S(CTcalc/CT_{99.9})$) 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 Executive Secretary.

(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 table 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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) 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) 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 Executive Secretary 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) 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 Executive Secretary 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) 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary-approved program comprising required elements, annual program status report to Executive Secretary, and regular watershed survey. Unfiltered systems are not eligible for credit. 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 Executive Secretary-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 Executive Secretary with a Executive Secretary- 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 Executive Secretary 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 Executive Secretary a proposed watershed control plan no later than one year before the applicable treatment compliance date in R309-215-15(13). The Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary. 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary. The survey must be conducted according to State guidelines and by persons the Executive Secretary approves.

(I) The watershed sanitary survey must meet the following criteria: encompass the region identified in the Executive Secretary-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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary determines that a system is not carrying out the approved watershed control plan, the Executive Secretary 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 Executive Secretary 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 Executive Secretary, 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: log10(monthly mean of daily influent turbidity) minus log10(monthly mean of daily effluent turbidity).

(B) Complies with Executive Secretary-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 Executive Secretary and conduct an assessment within 30 days to determine the cause of the high turbidity levels in the well. If the Executive Secretary determines that microbial removal has been compromised, the Executive Secretary may revoke treatment credit until the system implements corrective actions approved by the Executive Secretary 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 Executive Secretary 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 Executive Secretary-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 Executive Secretary 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 Executive Secretary 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 Executive Secretary-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 Executive Secretary 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 Executive Secretary 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 Executive Secretary. 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 = 1×10^4 x (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: $LRV = LOG_{10}(C_f)-LOG_{10}(C_p)$ 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 Executive Secretary.

(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 Executive Secretary. 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 = 3.16×10^6 x (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: $LRV = LOG_{10}(C_f) \times LOG_{10}(C_p)$ 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 ($LRV_{C\text{-}Test}$). If fewer than 20 modules are tested, then $LRV_{C\text{-}Test}$ is equal to the lowest of the representative LRVs among the modules tested. If 20 or more modules are tested, then $LRV_{C\text{-}Test}$ 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 Executive Secretary.

(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 Executive Secretary, 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: LRVDIT = the sensitivity of the direct integrity test; Cf = the typical feed concentration of the marker used in the test; and Cp = 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 Executive Secretary.

(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 Executive Secretary 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 Executive Secretary summarizing all continuous indirect integrity monitoring results triggering direct integrity testing and the corrective action that was taken in each case.

(A) Unless the Executive Secretary 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 Executive Secretary-approved alternative parameter and if the alternative parameter exceeds a Executive Secretary-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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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: Log credit = (0.001506 x $(1.09116)^{Temp}$) x CT.

(ii) Systems receive the Cryptosporidium treatment credit listed in this table 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: 0.3; 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: Log credit = $(0.0397 \times (1.09757)^{Temp}) \times CT$.

(c) Site-specific study. The Executive Secretary may approve alternative chlorine dioxide or ozone CT values to those listed in paragraph (b) above on a site-specific basis. The Executive Secretary must base this approval on a site-specific study a system conducts that follows a protocol approved by the Executive Secretary.

(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.

TABLE 215-5
UV Dose Table for Cryptosporidium, Giardia lamblia, and Virus Inactivation Credit

Log credit	Cryptosporidium UV dose (mJ/cm^2)	Giardia lamblia 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 Executive Secretary 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 Executive Secretary designates based on UV reactor operation. Systems must verify the calibration of UV sensors and must recalibrate sensors in accordance with a protocol the Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 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 Executive Secretary-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 Executive Secretary approved protocol no later than the applicable treatment compliance date in R309-215-15(13).

(B) As required by the Executive Secretary, monthly verification of operation within conditions of Executive Secretary 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 Executive Secretary-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 or determination of the mean Cryptosporidium level under R309-215-15(11) for unfiltered systems for the particular round of monitoring.

(b) Systems must keep any notification to the Executive Secretary 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.

KEY: drinking water, surface water treatment plant monitoring, disinfection monitoring, compliance determinations
Date of Enactment or Last Substantive Amendment: March 6, 2007[~~September 13, 2005~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

♦ ♦

Environmental Quality, Drinking Water
R309-220
Monitoring and Water Quality: Public Notification Requirements

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29367
FILED: 12/26/2006, 13:01

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule change is to address the changes required by the federal Long Term 1 and 2 Surface Water Treatment rules (LT1 and LT2), the Stage 2 Disinfection Byproducts rule (Stage 2), and the Improvement Priority rule (IPS). There are a total of eight amendments that address these rules (Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150). This rule adoption is necessary to maintain primacy. (DAR NOTE: The proposed amendments are as follows: Rule R309-105 under DAR No. 29369, Rule R309-110 under DAR No. 29364, Rule R309-200 under DAR No. 29371, Rule R309-210 under DAR No. 29365, Rule R309-215 under DAR No. 29366, Rule R309-220 under DAR No. 29367, Rule R309-225 under DAR No. 29368, and Rule R309-150 (changed to R309-400) under DAR No. 29363 all in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: This change incorporates the public notification requirements of LT1, LT2, and Stage 2.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-4-104, and 40 CFR 141 subparts T, W, L, U and V

ANTICIPATED COST OR SAVINGS TO:
❖ THE STATE BUDGET: Costs for the state budget, local governments, and other persons will be based on an aggregate for the changes in Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225 and R309-150. The Environmental Protection Agency (EPA) estimates state costs to be $9,260,000 annually. Using the percentage of Utah systems versus the national total (approximately 1%), Utah's annual impact is approximately $92,600.
❖ LOCAL GOVERNMENTS: For this rule change, aggregate costs will vary by water system size, sources utilized, and type of treatment. EPA estimates the total national annual cost at $143,407,000. Again using the percentage of Utah systems versus the national total, Utah's systems' impact is estimated to be $1,434,070 annually.
❖ OTHER PERSONS: Other persons that own and operate a public water system may have the same cost impact as listed under "local government" above. Costs to consumers will vary depending upon the water system size. EPA estimates the cost to vary from $1 to $301 per household per year.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Aggregate compliance costs for the rule change will vary depending upon the water system size, type of source, and type of treatment. EPA estimates the cost to vary from $1 to $301 per household per year. The highest costs are associated with the very small public water systems where there are very few connections to spread the cost of monitoring and treatment across. Persons that own and operate a public water system may have the same cost impact as listed under "local government" above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The Department of Environmental Quality agrees with the comments in the cost and compliance summaries above. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:
ENVIRONMENTAL QUALITY
DRINKING WATER
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Patti Fauver at the above address, by phone at 801-536-4196, by FAX at 801-536-4211, or by Internet E-mail at pfauver@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

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 Executive Secretary.

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 Cryptospridium Level.

R309-220-14 Notice by Executive Secretary on behalf of the public water system.

[~~R309-220-14~~]R309-220-15 Standard Health Effects Language.

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 Executive Secretary 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 Executive Secretary 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), [~~or~~] 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 Executive Secretary 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 Executive Secretary either in its rules or on a case-by-case basis.

(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 Executive Secretary 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 Executive Secretary. 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 Executive Secretary.

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 Executive Secretary determines that a Tier 1 notice is required;

(b) Violations of the monitoring and testing procedure requirements, where the Executive Secretary 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.

(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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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 Executive Secretary 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. Executive Secretary 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 Executive Secretary 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 Executive Secretary is required for:

(i) Violation of the turbidity MCL under R309-200-5(5)(a); or

(ii) Violation of the SWTR, ~~[or]~~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 Executive Secretary 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 Executive Secretary 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).

R309-220-13. Special Notice for Repeated Failure to Conduct Monitoring of the Source Water for Cryptosporidium and for Failure to Determine Bin Classification or Mean Cryptospridium 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 Executive Secretary-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 Executive Secretary on behalf of the Public Water System.

(1) The Executive Secretary may give the notice required by this rule on behalf of the owner and operator of the public water system if the Executive Secretary 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. [~~R309-220-14.~~] Standard Health Effects Language.

Microbiological Contaminants:

. . . . . .

KEY: drinking water, public notification, health effects
Date of Enactment or Last Substantive Amendment: March 6, 2007[~~September 13, 2005~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

Environmental Quality, Drinking Water
R309-225
Monitoring and Water Quality: Consumer Confidence Reports

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29368
FILED: 12/26/2006, 13:02

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule change is to address the changes required by the federal Long Term 1 and 2 Surface Water Treatment rules (LT1 and LT2), the Stage 2 Disinfection Byproducts rule (Stage 2), and the Improvement Priority rule (IPS). There are a total of eight amendments that address these rules (Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225, and R309-150). This rule adoption is necessary to maintain primacy. (DAR NOTE: The proposed amendments are as follows: Rule R309-105 under DAR No. 29369, Rule R309-110 under DAR No. 29364, Rule R309-200 under DAR No. 29371, Rule R309-210 under DAR No. 29365, Rule R309-215 under DAR No. 29366, Rule R309-220 under DAR No. 29367, Rule R309-225 under DAR No. 29368, and Rule R309-150 (changed to R309-400) under DAR No. 29363 all in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: This change incorporates Stage 2 detections using the locational running annual average compliance methodology.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-4-104, and 40 CFR 141 subparts T, W, L, U, and V

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Costs for the state budget, local governments, and other persons will be based on an aggregate for the changes in Rules R309-105, R309-110, R309-200, R309-210, R309-215, R309-220, R309-225 and R309-150. The Environmental Protection Agency (EPA) estimates state costs to be $9,260,000 annually. Using the percentage of Utah systems versus the national total (approximately 1%), Utah's annual impact is approximately $92,600.

❖ LOCAL GOVERNMENTS: For this rule change, aggregate costs will vary by water system size, sources utilized, and type of treatment. EPA estimates the total national annual cost at $143,407,000. Again using the percentage of Utah systems versus the national total, Utah's systems' impact is estimated to be $1,434,070 annually.

❖ OTHER PERSONS: Other persons that own and operate a public water system may have the same cost impact as listed under "local government" above. Costs to consumers will vary depending upon the water system size. EPA estimates the cost to vary from $1 to $301 per household per year.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Aggregate compliance costs for the rule change will vary depending upon the water system size, type of source, and type of treatment. EPA estimates the cost to vary from $1 to $301 per household per year. The highest costs are associated with the very small public water systems where there are very few connections to spread the cost of monitoring and treatment across. Persons that own and operate a public water system may have the same cost impact as listed under "local government" above.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The Department of Environmental Quality agrees with the comments in the cost and compliance summaries above. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
DRINKING WATER
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Patti Fauver at the above address, by phone at 801-536-4196, by FAX at 801-536-4211, or by Internet E-mail at pfauver@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 03/02/2007

AUTHORIZED BY: Ken Bousfield, Acting Director

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 [~~of~~]Contaminants in Drinking Water.

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.

. . . . . .

(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[~~sampling points~~]: 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.

. . . . . .

KEY: drinking water, consumer confidence report, water quality
Date of Enactment or Last Substantive Amendment: March 6, 2007 [~~December 9, 2002~~]
Notice of Continuation: May 16, 2005
Authorizing, and Implemented or Interpreted Law: 19-4-104; 63-46b-4

♦ ♦

Health, Health Care Financing, Coverage and Reimbursement Policy

R414-320

Medicaid Health Insurance Flexibility and Accountability Demonstration Waiver

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29380
FILED: 01/02/2007, 12:54

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule complies with the Standard Terms and Conditions of the Section 1115 Demonstration Waiver program approved by the Centers for Medicare and Medicaid Services. In addition, this rule is necessary to change the name of the Department's waiver program to Utah's Premium Partnership for Health Insurance (UPP). It also clarifies other sections that describe program eligibility.

SUMMARY OF THE RULE OR CHANGE: This amendment removes language that allows an individual enrolled in employer-sponsored health insurance for less than 60 days to be eligible for the Section 1115 Demonstration Waiver program. Throughout the text, this amendment changes all "HIFA" references to "UPP." It also adds a new premium change requirement, clarifies UPP enrollment eligibility criteria, specifies income requirements, allows an individual 45 days to provide eligibility information or verifications, clarifies eligibility criteria for a Primary Care Network or Children's Health Insurance Program recipient, clarifies the effective date of enrollment for faxed or online applications, deletes the new enrollment fee requirement for reenrollment, removes the requirement that an alien's sponsor is responsible to repay benefits, clarifies reimbursement criteria for dental coverage, and makes other minor clarifications.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Sections 26-18-3 and 26-1-5

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: There are minimal savings in state and federal dollars because this rule limits enrollment in the demonstration waiver program. Nevertheless, there is insufficient data to quantify dollar amounts.

❖ LOCAL GOVERNMENTS: There is no budget impact because local governments do not fund demonstration waiver programs.

❖ OTHER PERSONS: There is a minimal loss of revenue to providers and an out-of-pocket expense to Medicaid clients who do not qualify for the demonstration waiver program. Nevertheless, there is insufficient data to quantify dollar amounts.

COMPLIANCE COSTS FOR AFFECTED PERSONS: There is a minimal loss of revenue to a single provider and an out-of-pocket expense to a single Medicaid client who does not qualify for the demonstration waiver program. Nevertheless, there is insufficient data to quantify dollar amounts.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: This rule follows an emergency rule published to assure compliance with federal law to implement the Standard Terms and Conditions of the Section 1115 Demonstration Waiver program approved by the Centers for Medicare and Medicaid Services for employer-sponsored health insurance. Moving Medicaid clients to privately-provided insurance will have a positive impact on business. David N. Sundwall, MD, Executive Director (DAR NOTE: The 120-day (emergency) rule filing is under DAR No. 29250 in the

December 15, 2006, issue of the Bulletin, and was effective 11/28/2006.)

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

HEALTH
HEALTH CARE FINANCING,
COVERAGE AND REIMBURSEMENT POLICY
CANNON HEALTH BLDG
288 N 1460 W
SALT LAKE CITY UT 84116-3231, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Craig Devashrayee at the above address, by phone at 801-538-6641, by FAX at 801-538-6099, or by Internet E-mail at cdevashrayee@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/22/2007

AUTHORIZED BY: David N. Sundwall, Executive Director

R414. Health, Health Care Financing, Coverage and Reimbursement Policy.

R414-320. Medicaid Health Insurance Flexibility and Accountability Demonstration Waiver.

R414-320-1. Authority.

This rule is authorized by [~~Utah Code~~]Title 26, Chapter 18[~~. The Health Insurance Flexibility and Accountability (HIFA) Demonstration is authorized by a waiver of federal Medicaid and SCHIP requirements approved by the federal Center for Medicare and Medicaid Services~~]and allowed under Section 1115 of the Social Security Act. This rule establishes the eligibility requirements for enrollment and the benefits enrollees receive under the [~~HIFA Demonstration~~]Health Insurance Flexibility and Accountability Demonstration Waiver (HIFA), which is Utah's Premium Partnership for Health Insurance (UPP).

R414-320-2. Definitions.

The following definitions apply throughout this rule:

(1) "Adult" means an individual who is at least 19 and not yet 65 years of age.

(2) "Applicant" means an individual who applies for benefits under the [~~HIFA~~]UPP program, but who is not an enrollee.

(3) "Best estimate" means the Department's determination of a household's income for the upcoming certification period based on past and current circumstances and anticipated future changes.

(4) "Child" means an individual who is younger than 19 years of age.

(5) "Children's Health Insurance Program" or "CHIP" provides medical services for children under age 19 who do not otherwise qualify for Medicaid.

(6) "Department" means the Utah Department of Health.

(7) "Enrollee" means an individual who [~~has~~]applie[~~d~~]s for and [~~been~~]is found eligible for the [~~HIFA~~]UPP program.

(8) "Employer-sponsored health plan" means a health insurance plan offered through an employer where:

(a) the employer contributes at least 50 percent of the cost of the health insurance premium of the employee;

(b) coverage includes at least physician visits, hospital inpatient services, pharmacy, well child visits, and children's immunizations;

(c) lifetime maximum benefits are at least $1,000,000;

(d) the deductible is no more than $1,000 per individual; and

(e) the plan pays at least 70% of an inpatient stay after the deductible.

(9) ["~~HIFA" Health Insurance Flexibility and Accountability~~]"Utah's Premium Partnership for Health Insurance" (UPP) program provides cash reimbursement for all or part of the insurance premium paid by an employee for health insurance coverage through an employer-sponsored health insurance plan that covers either the eligible employee, the eligible spouse of the employee, dependent children, or the family.

(10) "Income averaging" means a process of using a history of past and current income and averaging it over a determined period of time that is representative of future income.

(11) "Income anticipating" means a process of using current facts regarding rate of pay, number of working hours, and expected changes to anticipate future income.

(12) "Income annualizing" means a process of determining the average annual income of a household, based on the past history of income and expected changes.

(13) "Local office" means any Bureau of Eligibility Services office location, outreach location, or telephone location where an individual may apply for medical assistance.

(14) "Open enrollment means a time period during which the Department accepts applications for the [~~HIFA~~]UPP program.

(15) "Public Institution" means an institution that is the responsibility of a governmental unit or that is under the administrative control of a governmental unit.

(16) "Primary Care Network" or "PCN" program provides primary care medical services to uninsured adults who do not otherwise qualify for Medicaid.

(17) "Recertification month" means the last month of the eligibility period for an enrollee.

(18) "Spouse" means any individual who has been married to an applicant or enrollee and has not legally terminated the marriage.

(19) "Verifications" means the proofs needed to decide if an individual meets the eligibility criteria to be enrolled in the program. Verifications may include hard copy documents such as a birth certificate, computer match records such as Social Security benefits match records, and collateral contacts with third parties who have information needed to determine the eligibility of the individual.

R414-320-3. Applicant and Enrollee Rights and Responsibilities.

(1) Any person who meets the limitations set by the Department may apply during an open enrollment period. The open enrollment period may be limited to:

(a) Adults with children [~~under age 19~~]living in the home;

(b) Adults without children [~~under age 19~~]living in the home;

(c) Adults enrolled in the PCN program;

(d) Children enrolled in the CHIP program;

(e) Adults or children who were enrolled in the Medicaid program within the last thirty days prior to the beginning of the open enrollment period; or

(f) Other groups designated in advance by the Department consistent with efficient administration of the program.

(2) If a person needs help to apply, he may have a friend or family member help, or he may request help from the local office or outreach staff.

(3) Applicants and enrollees must provide requested information and verifications within the time limits given. The Department will allow the client at least 10 calendar days from the date of a request to provide information and may grant additional time to provide information and verifications upon request of the applicant or enrollee.

(4) Applicants and enrollees have a right to be notified about the decision made on an application, or other action taken that affects their eligibility for benefits.

(5) Applicants and enrollees may look at information in their case file that was used to make an eligibility determination.

(6) Anyone may look at the eligibility policy manuals located at any Department local office.

(7) An individual must repay any benefits received under the [~~HIFA~~]UPP program if the Department determines that the individual was not eligible to receive such benefits.

(8) Applicants and enrollees must report certain changes to the local office within ten calendar days of the day the change becomes known. The local office shall notify the applicant at the time of application of the changes that the enrollee must report. Some examples of reportable changes include:

(a) An enrollee stops paying for coverage under an employer-sponsored health plan.

(b) An enrollee changes health insurance plans.

(c) An enrollee has a change in the amount of the premium they are paying for an employer-sponsored health insurance plan.

(d) An enrollee begins to receive coverage under, or begins to have access to Medicare or the Veteran's Administration Health Care System.

(e) An enrollee [~~has a change in the amount the enrollee pays for coverage under an employer-sponsored health plan~~]leaves the household or dies.

(f) An enrollee[~~leaves the household or dies~~] or the household moves out of state.

(g) [~~An enrollee or the household moves out of state~~]Change of address of an enrollee or the household.

(h) [~~Change of address of an enrollee or the household~~]An enrollee enters a public institution or an institution for mental diseases.

[~~(i) An enrollee enters a public institution or an institution for mental diseases.~~

] (9) An applicant or enrollee has a right to request an agency conference or a fair hearing as described in R414-301-5 and R414-301-6.

(10) An enrollee must continue to pay premiums and remain enrolled in an employer-sponsored health plan to be eligible for benefits.

(11) Eligible children may choose to enroll in their employer-sponsored health insurance plan and receive [~~HIFA~~]UPP benefits, or they may choose direct coverage through the Children's Health Insurance Program.

R414-320-4. General Eligibility Requirements.

(1) The provisions of R414-302-1, R414-302-2, R414-302-3, R414-302-5, and R414-302-6 apply to adult applicants and enrollees.

(2) The provisions of R382-10-6, R382-10-7, and R382-10-9 apply to child applicants and enrollees.

(3) An individual who is not a U.S. citizen and does not meet the alien status requirements of R414-302-1 or R382-10-6 is not eligible for any services or benefits under the [~~HIFA~~]UPP program.

(4) Applicants and enrollees for the [~~HIFA~~]UPP program are not required to provide Duty of Support information. An adult who would be eligible for Medicaid but fails to cooperate with Duty of Support requirements required by the Medicaid program cannot enroll in the [~~HIFA~~]UPP program.

(5) Individuals who must pay a spenddown or premium to receive Medicaid can enroll in the [~~HIFA~~]UPP program if they meet the program eligibility criteria in any month they do not receive Medicaid as long as the Department has not stopped enrollment under the provisions of R414-320-15. If the Department has stopped enrollment, the individual must wait for an applicable open enrollment period to enroll in the [~~HIFA~~]UPP program.

R414-320-6. Residents of Institutions.

(1) Residents of public institutions are not eligible for the [~~HIFA~~]UPP program.

(2) A child under the age of 18 is not a resident of an institution if [~~he~~]the child 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.

R414-320-7. Creditable Health Coverage.

(1) The Department adopts 42 CFR 433.138(b), 2005 ed., which [~~are~~]is incorporated by reference.

(2) An individual who is covered under a group health plan or other creditable health insurance coverage, as defined by the Health Insurance Portability and Accountability Act of 1996 (HIPAA), [~~at the time of application~~]is not eligible for enrollment[~~, if they have been enrolled for less than 60 days at the time of application~~].

(3) Eligibility for an individual who has access to but has not yet enrolled in employer-sponsored health insurance coverage will be determined as follows:

(a) If the cost of the employer-sponsored coverage [~~does not exceed~~]is less than 5% of the household's gross income, the individual is not eligible for the [~~HIFA~~]UPP program.

(b) For adults, if the cost of the employer-sponsored coverage exceeds 15% of the household's gross income the adult may choose to enroll in the [~~HIFA~~]UPP program or may choose direct coverage through the Primary Care Network program if enrollment has not been stopped under the provisions of R414-310-16.

(c) A child may choose enrollment in [~~HIFA~~]UPP or direct coverage under the CHIP program if the cost of the employer sponsored coverage is equal to or more than 5% of the household's gross income.

(d) An individual is considered to have access to coverage even if the employer offers coverage only during an employer's open enrollment period.

(4) An individual who is covered under Medicare Part A or Part B, or who could enroll in Medicare Part B coverage, is not eligible for enrollment, even if the individual must wait for a Medicare open enrollment period to apply for Medicare benefits.

(5) An individual who is enrolled in the Veteran's Administration (VA) Health Care System is not eligible for enrollment. An individual who is eligible to enroll in the VA Health Care System, but who has not yet enrolled, may be eligible for the

[~~HIFA~~]UPP program while waiting for enrollment in the VA Health Care System to become effective. To be eligible during this waiting period, the individual must initiate the process to enroll in the VA Health Care System. Eligibility for the [~~HIFA~~]UPP program ends once the individual becomes enrolled in the VA Health Care System.

(6) The Department shall deny eligibility if the applicant, spouse, or dependent child has voluntarily terminated health insurance coverage within the 90 days immediately prior to the application date for enrollment under the [~~HIFA~~]UPP program.

(a) An applicant, applicant's spouse, or dependent child can be eligible for the [~~HIFA~~]UPP program if their prior insurance ended more than 90 days before the application date.

(b) An applicant, applicant's spouse, or dependent child who voluntarily discontinues health insurance coverage under a COBRA plan, or under the [~~state~~]Utah Comprehensive Health Insurance Pool, or who is involuntarily terminated from an employer's plan may be eligible for the [~~HIFA~~]UPP program without a 90 day waiting period.

(7) An individual with creditable health coverage operated or financed by [~~the~~]Indian Health Services may enroll in the [~~HIFA~~]UPP program.

(8) Individuals must report at application and recertification whether each individual for whom enrollment is being requested has access to or is covered by a group health plan or other creditable health insurance coverage. This includes coverage that may be available through an employer or a spouse's employer, Medicare Part A or B, or the VA Health Care System.

(9) The Department shall deny an application or recertification if the applicant or enrollee fails to respond to questions about health insurance coverage for any individual the household seeks to enroll or recertify.

R414-320-8. Household Composition.

(1) The following individuals are included in the household when determining household size for the purpose of computing financial eligibility for the [~~HIFA~~]UPP program:

(a) The individual;

(b) The individual's spouse living with the individual;

(c) All children of the individual or the individual's spouse who are under age 19 and living with the individual; and

(d) An unborn child if the individual is pregnant, or if the applicant's legal spouse who lives in the home is pregnant.

(2) A household member who is temporarily absent for schooling, training, employment, medical treatment or military service, or who will return home to live within 30 days from the date of application is considered part of the household.

R414-320-9. Age Requirement.

(1) An individual must be younger than 65 years of age to enroll in the [~~HIFA~~]UPP program.

(2) The individual's 65th birthday month is the last month the person can be eligible for enrollment in the [~~HIFA~~]UPP program.

R414-320-10. Income Provisions.

(1) For an adult to be eligible to enroll, gross countable household income must be equal to or less than 150% of the federal non-farm poverty guideline for a household of the same size.

(2) For children to be eligible to enroll, gross countable household income must be equal to or less than 200% of the federal non-farm poverty guideline for a household of the same size.

(3) All gross income, earned and unearned, received by the individual and the individual's spouse is counted toward household income, unless this section specifically describes a different treatment of the income.

(4) Any income in a trust that is available to, or is received by a household member, is countable income.

(5) Payments received from the Family Employment Program, Working Toward Employment program, refugee cash assistance or adoption support services as authorized under Title 35A, Chapter 3 are countable income.

(6) Rental income is countable income. The following expenses can be deducted:

(a) Taxes and attorney fees needed to make the income available;

(b) Upkeep and repair costs necessary to maintain the current value of the property;

(c) Utility costs only if they are paid by the owner; and

(d) Interest only on a loan or mortgage secured by the rental property.

(7) Cash contributions made by non-household members are counted as income unless the parties have a signed written agreement for repayment of the funds.

(8) The interest earned from payments made under a sales contract or a loan agreement is countable income to the extent that these payments will continue to be received during the certification period.

(9) Needs-based Veteran's pensions are counted as income. Only the portion of a Veteran's Administration check to which the individual is legally entitled is countable income.

(10) Child support payments received for a dependent child living in the home are counted as that child's income.

(11) In-kind income, which is goods or services provided to the individual from a non-household member and which is not in the form of cash, for which the individual performed a service or which is provided as part of the individual's wages is counted as income. In-kind income for which the individual did not perform a service, or did not work to receive, is not counted as income.

(12) Supplemental Security Income and State Supplemental payments are countable income.

(13) Income that is defined in 20 CFR 416 Subpart K, Appendix, 2004 edition, which is incorporated by reference, is not countable.

(14) Payments that are prohibited under other federal laws from being counted as income to determine eligibility for federally-funded medical assistance programs are not countable.

(15) Death benefits are not countable income to the extent that the funds are spent on the deceased person's burial or last illness.

(16) A bona fide loan that an individual must repay and that the individual has contracted in good faith without fraud or deceit, and genuinely endorsed in writing for repayment is not countable income.

(17) Child Care Assistance under Title XX is not countable income.

(18) Reimbursements of Medicare premiums received by an individual from Social Security Administration or the [~~State~~]Department [~~of Health~~]are not countable income.

(19) Earned and unearned income of a child is not countable income if the child is not the head of a household.

(20) Educational income, such as educational loans, grants, scholarships, and work-study programs are not countable income. The individual must verify enrollment in an educational program.

(21) Reimbursements for employee work expenses incurred by an individual are not countable income.

(22) The value of food stamp assistance is not countable income.

R414-320-12. Assets.

There is no asset test for eligibility in the [~~HIFA~~]UPP program.

R414-320-13. Application Procedure.

(1) The application is the initial request from an applicant for [~~HIFA~~]UPP enrollment. The application process includes gathering information and verifications to determine the individual's eligibility for enrollment.

(2) The applicant must complete and sign a written application or complete an application on-line via the Internet to enroll in the [~~HIFA~~]UPP program.

(a) The Department accepts any Department-approved application form for medical assistance programs offered by the state as an application for the [~~HIFA~~]UPP program. The local office eligibility worker may require the applicant to provide additional information that was not asked for on the form the applicant completed, and may require the applicant to sign a signature page from a hardcopy medical application form.

(b) If an applicant cannot write, he must make his mark on the application form and have at least one witness to the signature. A legal guardian or a person with power of attorney may sign the application form for the applicant.

(c) An authorized representative may apply for the applicant if unusual circumstances prevent the individual from completing the application process himself. The applicant must sign the application form if possible.

(3) The date of application will be decided as follows:

(a) The date the Department receives a completed, signed application is the application date when the application is delivered to a local office.

(b) The date postmarked on the envelope is the application date when a completed, signed application is mailed to the agency.

(c) The date the Department receives a completed, signed application via facsimile transfer is the application day. The agency accepts the signed application sent via facsimile as a valid application and does not require it to be signed again.

(d) The transaction date is the application date when the application is submitted online.

(4) If an applicant has a legal guardian, a person with a power of attorney, or an authorized representative, the local office shall send decision notices, requests for information, and forms that must be completed to both the individual and the individual's representative, or to just the representative if requested or if determined appropriate.

(5) The Department shall reinstate a [~~HIFA~~]UPP case without requiring a new application if the case was closed in error.

(6) The Department shall continue enrollment without requiring a new application if the case was closed for failure to complete a recertification or comply with a request for information or verification:

(a) If the enrollee complies before the effective date of the case closure or by the end of the month immediately following the month the case was closed; and

(b) The individual continues to meet all eligibility requirements.

(7) An applicant may withdraw an application any time before the Department completes an eligibility decision on the application.

(8) If an eligible household requests enrollment for a new household member, the application date for the new household member is the date of the request. A new application form is not required. However, the household shall provide the information necessary to determine eligibility for the new member, including information about access to creditable health insurance.

(a) Benefits for the new household member will be allowed from the date of request or the date an application is received through the end of the current certification period.

(b) A new income test is not required to add the new household member for the months remaining in the current certification period.

(c) A new household member may be added only if the Department has not stopped enrollment under [~~s~~]Section R414-320-15.

(d) Income of the new member will be considered at the next scheduled recertification.

(9) A child who loses Medicaid coverage because he or she has reached the maximum age limit and does not qualify for any other Medicaid program without paying a spenddown, may enroll in [~~HIFA~~]UPP without waiting for the next open enrollment period.

(10) A child who loses Medicaid coverage because he or she is no longer deprived of parental support and does not qualify for any other Medicaid program without paying a spenddown, may enroll in [~~HIFA~~]UPP without waiting for the next open enrollment period.

(11) A new child born to or adopted by an enrollee may be enrolled in [~~HIFA~~]UPP without waiting for the next open enrollment period.

R414-320-14. Eligibility Decisions and Recertification.

(1) The Department adopts 42 CFR 435.911 and 435.912, 2004 ed., which are incorporated by reference.

(2) When an individual applies for [~~HIFA~~]UPP, the local office shall determine if the individual is eligible for Medicaid. An individual who qualifies for Medicaid without paying a spenddown or a premium cannot enroll in the [~~HIFA~~]UPP program. If the individual appears to qualify for Medicaid, but additional information is required to determine eligibility for Medicaid, the applicant must provide additional information requested by the eligibility worker. Failure to provide the requested information shall result in the application being denied.

(a) If the individual must pay a spenddown or premium to qualify for Medicaid, the individual may choose to enroll in the [~~HIFA~~]UPP program if it is an open enrollment period and the individual meets all the applicable criteria for eligibility. If the [~~HIFA~~]UPP program is not in an enrollment period, the individual must wait for an open enrollment period.

(b) At recertification, the local office shall first review eligibility for Medicaid. If the individual qualifies for Medicaid without a spenddown or premium, the individual cannot be reenrolled in the [~~HIFA~~]UPP program. If the individual appears to qualify for Medicaid, the applicant must provide additional information requested by the eligibility worker. Failure to provide the requested information shall result in the application being denied.

(3) To enroll, the individual must meet [~~the~~]enrollment eligibility criteria [~~for enrollment and it must be~~]at a time when the Department has not already stopped enrollment under provisions of

[~~s~~]Section R414-320-15. An applicant [~~must be able to enroll in his or her employer-sponsored health insurance by the end of the month following the application month to be eligible~~]may apply for UPP anytime between the month before the applicant signs up for the employer's health insurance plan and before coverage begins. Otherwise, eligibility will be denied, and the individual may reapply during another open enrollment period.

(4) The local office shall complete a determination of eligibility or ineligibility for each application unless:

(a) The applicant voluntarily withdraws the application and the local office sends a notice to the applicant to confirm the withdrawal;

(b) The applicant died; or

(c) The applicant cannot be located; or

(d) The applicant has not responded to requests for information within the [~~30~~]45 day application period or by the date the eligibility worker asked the information or verifications to be returned, if that date is later.

(5) The enrollee must recertify eligibility at least every 12 months.

(6) The local office eligibility worker may require the applicant, the applicant's spouse, or the applicant's authorized representative to attend an interview as part of the application and recertification process. Interviews may be conducted in person or over the telephone, at the local office eligibility worker's discretion.

(7) The enrollee must complete the recertification process and provide the required verifications by the end of the recertification month.

(a) If the enrollee completes the recertification and continues to meet all eligibility criteria, coverage will be continued without interruption.

(b) The case will be closed at the end of the recertification month if the enrollee does not complete the recertification process and provide required verifications by the end of the recertification month.

(c) If an enrollee does not complete the recertification by the end of the recertification month, but completes the process and provides required verifications by the end of the month immediately following the recertification month, coverage will be reinstated as of the first of that month if the individual continues to be eligible.

(8) The eligibility worker may extend the recertification due date if the enrollee demonstrates that a medical emergency, death of an immediate family member, natural disaster or other similar cause prevented the enrollee from completing the recertification process on time.

R414-320-15. Effective Date of Enrollment and Enrollment Period.

(1) The effective date of enrollment is the day that a completed and signed application or an on-line application is received by the local office and the applicant meets all eligibility criteria. The effective date for applications submitted by fax and online is the date of the electronic transmission. The Department shall not provide any benefits before the effective enrollment date.

(2) The effective date of enrollment cannot be before the month in which the applicant pays a premium for the employer-sponsored health insurance and is determined as follows:

(a) The effective date of enrollment is the date an application is received and the person is found eligible, if the applicant enrolls in and pays the first premium for the employer-sponsored health insurance in the application month.

(b) If the applicant will not pay a premium for the employer-sponsored health insurance in the application month, the effective date of enrollment is the first day of the month in which the applicant pays a premium for the employer-sponsored health insurance. The applicant must enroll in the employer-sponsored health insurance no later than the end of the month following the month the application is received.

(c) If the applicant cannot enroll in the employer-sponsored health insurance by the end of the month immediately following the application month, the application shall be denied and the individual will have to reapply during another open enrollment period.

(3) The effective date of enrollment for a newborn or newly adopted child is the date the newborn or newly adopted child is enrolled in the employer-sponsored health insurance if the family requests the coverage within 30 days of the birth or adoption. If the request is more than 30 days after the birth or adoption, enrollment is effective the date of report.

(4) The effective date of re-enrollment for a recertification is the first day of the month after the recertification month, if the recertification is completed as described in R414-320-13.

(5) If the enrollee does not complete the recertification as described in R414-320-13, and the enrollee does not have good cause for missing the deadline, the case will remain closed and the individual may reapply during another open enrollment period.

(6) An individual found eligible shall be eligible from the effective date through the end of the first month of eligibility and for the following 12 months. If the enrollee completes the redetermination process in accordance with R414-320-13 and continues to be eligible, the recertification period will be for an additional 12 months beginning the month following the recertification month. Eligibility could end before the end of a 12-month certification period for any of the following reasons:

(a) The individual turns age 65;

(b) The individual becomes entitled to receive Medicare, or becomes covered by Veterans Administration Health Insurance;

(c) The individual dies;

(d) The individual moves out of state or cannot be located;

(e) The individual enters a public institution or an Institute for Mental Disease.

(7) If an adult enrollee discontinues enrollment in employer-sponsored insurance coverage, eligibility ends. If the enrollment in employer-sponsored insurance is discontinued involuntarily and the individual notifies the local office within 10 calendar days of when the insurance ends, the individual may switch to the PCN program for the remainder of the certification period.

(8) A child enrollee may discontinue employer-sponsoreed health insurance and move to direct coverage under the Children's Health Insurance Program at any time during the certification period without any waiting period.

(9) An individual enrolled in the Primary Care Network or the Children's Health Insurance Program who enrolls in an employer-sponsored plan may switch to the [~~HIFA~~]UPP program if the individual reports to the local office within 10 calendar days of enrolling in an employer-sponsored plan and before coverage on the employer-sponsored plan begins.

(10) If a [~~HIFA~~]UPP case closes for any reason, other than to become covered by another Medicaid program or the Children's Health Insurance Program, and remains closed for one or more calendar months, the individual must submit a new application to the local office during an open enrollment period to reapply. The individual must meet all the requirements of a new applicant.

(11) If a [~~HIFA~~]UPP case closes because the enrollee is eligible for another Medicaid program or the Children's Health Insurance Program, the individual may reenroll if there is no break in coverage between the programs, even if the State has stopped enrollment under R414-320-15.

(a) If the individual's 12-month certification period has not ended, the individual may reenroll for the remainder of that certification period. The individual is not required to complete a new application or have a new income eligibility determination.

(b) If the 12-month certification period from the prior enrollment has ended, the individual may still reenroll. However, the individual must complete a new application[~~,~~] and meet eligibility and income guidelines[~~, and pay a new enrollment fee~~] for the new certification period.

(c) If there is a break in coverage of one or more calendar months between programs, the individual must reapply during an open enrollment period.

R414-320-18. Improper Medical Coverage.

(1) An individual who receives benefits under the [~~HIFA~~]UPP program for which he is not eligible is responsible to repay the Department for the cost of the benefits received.

(2) [~~An alien and the alien's sponsor are jointly liable for benefits received for which the individual was not eligible.~~

~~(3)~~]An overpayment of benefits includes all amounts paid by the Department for medical services or other benefits on behalf of an enrollee or for the benefit of the enrollee during a time period that the enrollee was not actually eligible to receive such benefits.

R414-320-19. Benefits.

(1) The [~~HIFA~~]UPP program provides cash reimbursement to enrollees as described in this section.

(2) The reimbursement shall not exceed the amount the employee pays toward the cost of the employer-sponsored coverage.

(3) The amount of reimbursement for an adult will be up to $150 per month per individual.

(4) The amount of reimbursement for children will be up to $100 per month per child for medical and an additional $20 if they choose to enroll in employer-sponsored dental coverage.

(a) When the employer-sponsored insurance does not include dental benefits, the children may receive cash reimbursement up to $100 for the medical insurance cost and enroll in direct dental coverage under the CHIP Program.

(b) When the employer-sponsored insurance includes dental, the applicant will be given the choice of enrolling the children in the employer-sponsored dental and receiving an additional reimbursement up to $20, or enrolling in direct dental coverage through the CHIP Program.

KEY: Medicaid, PCN, CHIP
Date of Enactment or Last Substantive Amendment: [~~November 1, 2006~~]2007
Authorizing, and Implemented or Interpreted Law: 26-18-3; 26-1-5

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Human Services, Substance Abuse and Mental Health
R523-1-2
State and Local Relationships

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29381
FILED: 01/02/2007, 13:59

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule is being amended to reflect current monitoring practice, to remove duplication of a rule that restates existing law, and to revise conflict resolution between the Community Mental Health Centers and the Utah State Hospital. The Division of Substance Abuse and Mental Health recognized duplication existed between state law and administrative rule in reference to the requirements for the local mental health plan of services to be submitted to the Division. The conflict resolution process described in Section R523-1-11 has been streamlined and moved into this section as it was too cumbersome and seemed to fit more appropriately in a section of rule that set forth procedures relating to the relationships between the Division and local mental health authorities. (DAR NOTE: The proposed amendment to Section R523-1-11 is under DAR No. 29382 in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: This change removes references to Section 17-43-301 and Subsection 62A-15-103(3). There is also the removal of the requirement to submit an area plan that is already mandated by statute and more clearly defines the Division's role in contract monitoring, which cites practices that more accurately reflect current contracting and monitoring practices. This change adds a consolidated and streamlined conflict resolution practice that was formally cumbersome as cited in Section R523-1-11, but fit more appropriately in this section. Conflict resolutions will follow a four-step process: 1) a committee will review the issues and make recommendations; 2) if no resolution, discussions between the center's clinical or medical director and the State Hospital's clinical director; 3) if no resolution, then discussions between the center's director and the superintendent of the State Hospital; and finally 4) if no resolution, the Division director or designee makes a final determination. If the local mental health authorities have conflicts between each other, the Division director or designee shall make a final determination.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 62A-15-103, Subsection 62A-15-105(5), and Sections 62A-15-603 and 17-43-302

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: The practices described in these amendments are already in place so no increase or decrease in the state budget is required to implement or administer these changes.

❖ LOCAL GOVERNMENTS: The practices described in these amendments are already in place so no increase or decrease in the local government budgets is required to implement or administer these changes.

❖ OTHER PERSONS: This rule pertains only to the Division and its relationships with the local mental health authorities and the Utah State Hospital. There should be no impact on the business dealings of the local mental health authorities and their private contractors, no apparent impact on others within the state.

COMPLIANCE COSTS FOR AFFECTED PERSONS: This rule pertains only to the Division and its relationships with the local mental health authorities and the Utah State Hospital. There should be no impact on the business dealings of the local mental health authorities and their private contractors, no apparent impact on others within the state.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: After careful review, the Department of Human Services has determined that this rule will have no financial impact on businesses in the State of Utah. Lisa-Michele Church, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

HUMAN SERVICES
SUBSTANCE ABUSE AND MENTAL HEALTH
Room 209
120 N 200 W
SALT LAKE CITY UT 84103-1500, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Thom Dunford at the above address, by phone at 801-538-4519, by FAX at 801-538-9892, or by Internet E-mail at TDUNFORD@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/22/2007

AUTHORIZED BY: Mark I Payne, Director

R523. Human Services, Substance Abuse and Mental Health.
R523-1. Procedures.
R523-1-2. State and Local Relationships.

(1) Local Mental Health Authorities (LMHA) are the "service designees" of the State Division of Substance Abuse and Mental Health (Division)[~~. As service designees, LMHAs receive all formula pass-through state and federal mental health funds~~] to provide comprehensive mental health services as defined by state law pursuant to Section 17-43-302.[~~ Local Mental Health Authorities are considered sole source providers for these services and are statutorily required to provide them (17-43-301).~~]

(2) When the Division[~~ of Substance Abuse and Mental Health~~] requires other services outside the comprehensive range specified by law, it shall provide LMHAs the first opportunity to accept or reject the service contract. If the LMHA rejects the contract in writing or fails to meet the terms of the contract as determined by the Division, the Division may contract with any qualified provider, through a Request For Proposal (RFP) process. If an agency other than the LMHA receives a contract to provide a mandated service, the contracted service provider shall inform the LMHA that they have been awarded the contract and offer to coordinate the service with existing services provided by the LMHA[~~ (17-43-301, 62A-15-103(3))~~].

(3) [~~Local Mental Health Authorities must submit an annual local Mental Health Plan of Service to the Division of Substance Abuse and Mental Health for approval before each contract period. The Plan shall describe the intended use of state and federal contracted dollars.~~]The Division has the responsibility and authority to monitor LMHA contracts. Each mental health catchment area shall be visited at least once annually to monitor compliance. The mental health center will be provided preliminary findings from the site review and an opportunity to comment. A written report will be sent to each LMHA describing the findings from the site visit.

(4) [~~The Division of Substance Abuse and Mental Health has the responsibility and authority to monitor LMHA contracts to see that they are in compliance with existing laws, policies, standards and rules. Each mental health catchment area shall be visited at least once annually to monitor compliance. The mental health center will be provided preliminary findings from the site review and an opportunity to comment. A written report will be sent to each LMHA describing the findings from the site visit.~~]The Division shall oversee the continuity of care for services provided to consumers and resolve conflicts between the Utah State Hospital (USH) and LMHA, and also those between LMHA's.

(a) if negotiations between LMHA's and the USH regarding admissions, discharges or provisions of consumer services fail to be resolved at the local level, the following steps shall be taken:

(i) the director of the Division or designee shall appoint a committee to review the facts of the conflict and make recommendations;

(ii) if the recommendations of the committee do not adequately resolve the conflict, the clinical or medical director of the local mental health center and USH clinical director shall meet and attempt to resolve the conflict;

(iii) if a resolution cannot be reached, the community mental health center director and the superintendent of the USH shall meet and attempt to resolve the conflict;

(iv) if a resolution cannot be reached, the director of the Division or designee shall make the final decision.

(b) If conflicts arise between LMHA's regarding admissions, discharges, or provisions of consumer services, the final authority for resolution shall rest with the director of the Division or designee.

KEY: bed allocations, due process, prohibited items and devices, fees
Date of Enactment or Last Substantive Amendment: [~~March 7, 2005~~]2007

Notice of Continuation: December 11, 2002
Authorizing, and Implemented or Interpreted Law: 62A-12-102; 62A-12-104; 62A-12-209.6(2); 62A-12-283.1(3)(a)(i); 62A-12-283.1(3)(a)(ii); 62A-15-612(2); 62A-15-103; 62A-15-105(5); 62A-15-603; 17-43-302

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Human Services, Substance Abuse and Mental Health
R523-1-11
Policies and Procedures Relating to Referrals, Admissions, and Transfers of Mental Health Consumers to the Utah State Hospital and Between Mental Health Center Catchment Areas

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29382
FILED: 01/02/2007, 14:02

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The Division of Substance Abuse and Mental Health has determined that the procedures and conflict resolution process described in this rule were in need of streamlining to more accurately reflect current practices. It was also determined that these practices should be moved into a section that set forth procedures relating to the relationships between the Division and the local mental health authorities, so they have been moved to Section R523-1-2. (DAR NOTE: The proposed amendment to Section R523-1-2 is under DAR No. 29381 in this issue, January 15, 2007, of the Bulletin.)

SUMMARY OF THE RULE OR CHANGE: All practices described in this rule have been moved to Subsection R523-1-2(4) and replaced with a simple statement that the Division shall oversee the continuity of care for services provided to consumers and resolve conflicts between the State Hospital and local mental health authorities. Conflict resolutions will follow a four-step process: 1) a committee will review the issues and make recommendations; 2) if no resolution, discussions between the center's clinical or medical director and the State Hospital's clinical director; 3) if no resolution, then discussions between the center's director and the superintendent of the State Hospital; and finally 4) if no resolution, the Division director or designee makes a final determination. If the local mental health authorities have conflicts between each other, the Division director or designee shall make a final determination.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 62A-15-105(5) and Section 62A-15-603

ANTICIPATED COST OR SAVINGS TO:
❖ THE STATE BUDGET: The practices described in this amendment are already in place so there will be no increase or decrease in the state budget to implement or administer these changes.
❖ LOCAL GOVERNMENTS: The practices described in this amendment are already in place so there will be no increase or decrease in local government budgets to implement or administer these changes.
❖ OTHER PERSONS: This rule pertains only to the Division and its relationships with the local mental health authorities. There should be no impact on the business dealings of the local mental health authorities and their private contractors; and there should be no impact on others within the state.

COMPLIANCE COSTS FOR AFFECTED PERSONS: This rule pertains only to the Division and its relationships with the local mental health authorities. There should be no impact on the business dealings of the local mental health authorities and their private contractors; and there should be no impact on others within the state.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: After careful review, the Department of Human Services has determined that this rule will have no financial impact on businesses in the State of Utah. Lisa-Michele Church, Executive Director

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THIS RULE MAY BECOME EFFECTIVE ON: 02/22/2007

AUTHORIZED BY: Mark I Payne, Director

R523. Human Services, Substance Abuse and Mental Health.
R523-1. Procedures.
|~~R523-1-11. Policies and Procedures Relating to Referrals, Admissions, and Transfers of Mental Health Consumers to the Utah State Hospital and Between Mental Health Center Catchment Areas.~~
~~(1) All consumers shall be referred into the public mental health system through admission to the local comprehensive community~~

~~mental health center. For purposes of this document, whenever center is used, it means a local comprehensive community mental health center or agency that provides treatment and services to residents of a designated geographic area, operated by or under contract with a local mental health authority, in compliance with state standards for local comprehensive community mental health centers.~~

~~(2) In providing services to consumers from other catchment areas, including interstate transient consumers, the Center staff shall have the responsibility to assess the consumer's needs and to provide necessary emergency services consistent with the Center's current emergency procedures. Following such interventions, the Center staff shall assist the consumer in arranging for services from resources near the individual's place of residence.~~

~~(3) A Center shall utilize the services of the Utah State Hospital (hereinafter referred to as Hospital) when evaluation by the Center staff and the Hospital staff determine such services to be the treatment of choice. In every instance, continuity of consumer care will be a joint responsibility between the Center staff and the Hospital. The Center shall (1) provide information upon transfer to the Hospital; (2) participate in planning for transfer out of the Hospital; and (3) provide appropriate supportive services to the consumer upon their return to the community.~~

~~(4) The Hospital and the Centers are expected to provide services only within the state substance abuse and mental health systems' limited fiscal capacity.~~

~~(5) All consumers referred to the Utah State Hospital will have been seen, evaluated, and admitted to the local public mental health center. Prior to the consumer admission to the hospital, the center must follow the procedures specified via the Bed Allocation Policy. If the Hospital has reached maximum bed capacity, referred consumer's shall be placed on the Hospital waiting list.~~

~~(6) The Hospital, in consultation with the Centers, has the responsibility of prioritizing consumers ready for discharge. In the event of a consumer who is ready for discharge from the Hospital, but is from a different catchment area other than the referring center, the two centers will negotiate and coordinate services. Nevertheless, final discharge coordination remains the responsibility of the referring center. If a suitable placement cannot be achieved, the referring Center may appeal to the Chair of the Continuity of Care Committee for arbitration and resolution.~~

~~(7) If a consumer arrives at the Hospital without having been referred by a Center, the Hospital shall contact the appropriate Center to insure appropriate disposition. Should an emergency admission occur to the Hospital, the Center shall visit the consumer within three working days to coordinate services.~~

~~(8) Appropriate information pertaining to the consumer's evaluation, care, and treatment will follow the consumer to and from the Hospital.~~

~~(9) Each Center will designate a Hospital liaison(s). The Hospital will designate a Center liaison(s) for each of its programs. All consumer transfers between a Center and the Hospital will be managed through the identified Center liaisons.~~

~~(10) The emergency needs of transient consumers will be met by the Centers and will be consistent with the Centers' current emergency procedures. The Center providing emergency services will follow the appropriate procedures in coordinating the transfer of the consumer to his place of residence. Centers transferring transient consumers to the Hospital will comply with the consumer Continuity of Care procedures defined in this Policy.~~

~~(11) The Center liaison shall meet at least monthly with Hospital staff to discuss the treatment progress of the consumer and jointly plan with Hospital staff around discharge procedures.~~

~~(12) When it is agreed by the Hospital and the Center liaison that a consumer has received maximum hospital benefit, it will be the responsibility of the Center to find a satisfactory placement for the consumer within a 15 day period. Written documentation must be submitted to the Hospital when a satisfactory placement cannot be accomplished within 15 days.~~

~~(13) When resources are available only outside the consumer's catchment area, it will be the responsibility of the original referring Center to negotiate arrangements for an appropriate placement. Within seven days, the receiving center will provide verbal or written acceptance or denial of the consumer transfer. The receiving Center shall accept the consumer on a 30 day trial basis. If during the 30 day trial period, the placement is determined unsuccessful, the initiating Center will assume responsibility for the consumer's care. However, after 30 days, if the consumer's placement is successful, the receiving Center will assume responsibility for the consumer's care; and the consumer becomes a resident of that Center.~~

~~(14) When referrals involve the placement of consumers outside of a comprehensive community mental health center for time limited treatment, the Center of origin remains responsible for the consumer's ongoing continuity of care. However, if the consumer wishes to reside in a new catchment area, the receiving center assumes responsibility for the consumer's ongoing continuity of care needs.~~

~~(15) In the event that either the referring or receiving Center perceive that procedures have not been adhered to, the Center liaisons from the two catchment areas will discuss the continuity of care concerns in an effort to bring about an acceptable resolution to both parties. If the liaisons cannot resolve their concerns, a written compliant may be submitted to the Chair of the Continuity of Care Committee for final arbitration.~~

~~(16) For the purposes of admitting and discharging children and youth to and from the State Hospital, all continuity of care procedures defined in this Rule will be adhered to.~~

~~(17) In addition, the following procedures shall apply for children and youth:~~

~~(a) The Center will document that less restrictive placement alternatives have been considered and are inadequate to meet the consumer's treatment needs.~~

~~(b) The Center and the Hospital both agree that restrictive intermediate care at the Hospital is in the best interest in meeting the treatment needs of the consumer.~~

~~(c) If an agency other than a local comprehensive community mental health center is seeking to admit a consumer to the hospital, both the referring agency and Center must agree at the time of referral to participate in the child's service plan. Within seven working days, the Center will notify the referring agency regard the status of the referral.~~

~~(d) If there is a custodial agency other than the Division of Substance Abuse and Mental Health, the agency agrees at admission to the hospital to retain custody of the consumer.~~]

KEY: bed allocations, due process, prohibited items and devices, fees

Date of Enactment or Last Substantive Amendment: [~~March 7, 2005~~]2007

Notice of Continuation: December 11, 2002
Authorizing, and Implemented or Interpreted Law: 62A-12-102; 62A-12-104; 62A-12-209.6(2); 62A-12-283.1(3)(a)(i); 62A-12-283.1(3)(a)(ii); 62A-15-612(2)

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Human Services, Substance Abuse and Mental Health
R523-1-23
Case Manager Certification

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29383
FILED: 01/02/2007, 14:04

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This rule is being established to legitimize actions taken by the Division of Substance Abuse and Mental Health to meet billing requirements issued by Medicaid. The Division entered into an informal agreement with Medicaid to create a training and licensing process for mental health case managers to ensure competent and qualified workers are providing case management services. The curriculum, training, and certification of case managers has already been a practice throughout the State of Utah, so this rule does not create or mandate a new system or process, but merely institutionalizes a practice that has been going on for several years.

SUMMARY OF THE RULE OR CHANGE: This rule provides for the certification of case managers who work in the State of Utah for local mental health and/or substance abuse authorities. Minimum standards for qualification to seek certification are outlined; testing and experience standards are set; a request for a waiver of the minimum standards is provided; a process for application is identified; continuation of licensing requirements are established; and a recertification process is provided along with a revocation process and appeals.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 62A-15-105(5)

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: Implementation of this rule will not require the Division to provide additional outlays of capital beyond that which has already been budgeted currently and in past years. A database for tracking certified case managers and recertification time lines already exists and is being maintained. Other costs currently tied to this rule are: support staff time used for printing and sending certificates; support staff time used for maintaining the database; the cost of buying certificates; the cost of printing names on certificates; staff time for administering and scoring tests, and staff time for maintaining and updating test standards.

❖ LOCAL GOVERNMENTS: Local governments have no cost associated with this rule because they do not certify or train persons seeking case management certification.

❖ OTHER PERSONS: Costs to others could include travel expenses to take the test and possible updated training costs for continuing education hours to maintain certification. Eight hours of continuing education are required per year and recertification is due every three years. Continuing education hours may be obtained through in-house agency trainings or purchased through conferences and seminars so actual costs would be difficult to anticipate.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Costs associated with this rule are limited to those persons who are seeking case management certification and include travel expenses to take the test and updated training costs for continuing education hours to maintain certification. Continuing education hours may be obtained through in-house agency trainings or purchase through conferences and seminars so actual costs would be difficult to anticipate.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: After careful review, the Department of Human Services has determined that this rule will have no financial impact on businesses in the State of Utah. Lisa-Michele Church, Executive Director

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DIRECT QUESTIONS REGARDING THIS RULE TO:
Thom Dunford at the above address, by phone at 801-538-4519, by FAX at 801-538-9892, or by Internet E-mail at TDUNFORD@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/22/2007

AUTHORIZED BY: Mark I Payne, Director

R523. Human Services, Substance Abuse and Mental Health.
R523-1. Procedures.
R523-1-23. Case Manager Certification.

(1) Definitions.

(a) "Mental Health and Substance Abuse Case Manager" means an individual under the supervision of a qualified provider employed by the local mental health authority or contracted by a local substance abuse authority, who is responsible for coordinating, advocating, linking and monitoring activities that assist individuals with serious and often persistent mental illness and serious emotional disorder in children and individuals with substance abuse disorders to access prescribed medical and related therapeutic services. Also, to promote the individual's general health and their ability to function

independently and successfully in the community.

(b) "Qualified providers" include any individual who is a licensed physician, a licensed psychologist, a licensed clinical social worker, a licensed certified social worker, a licensed social service worker, a licensed advanced practice registered nurse, a licensed registered nurse, a licensed practical nurse, a licensed professional counselor, licensed marriage and family counselor, or a licensed. substance abuse counselor, and employed by a local mental health authority or contracted by a local mental health authority.

(2) A certified case manager must meet the following minimum standards:

(a) be an individual who is not a licensed mental health professional, who is supervised by one of the qualified providers listed in Subsection R523-1-23(1)(b);

(b) be at least 18 years of age;

(c) have at least a high school degree or a GED;

(d) have at least two years experience in the support of individuals with mental illness or substance abuse;

(e) be employed by the local mental health authority or contracted by a local substance abuse authority;

(f) pass a Division exam which tests basic knowledge, ethics, attitudes and case management skills with a score of 70 percent or above; and

(g) completes an approved case management practicum.

(3) An individual applying to become a certified case manager may request a waiver of the minimum standards in Subsection R523-1-23(2) based on their prior experience and training. The individual shall submit the request in writing to the Division. The Division shall review the documentation and issues a written decision regarding the request for waiver.

(4) Applications and instructions to apply for certification to become a case manager can be obtained from the Division of Substance Abuse and Mental Health. Only complete applications supported by all necessary documents shall be considered.

(a) Individuals will be notified in writing of disposition and determination to grant or deny the application within 60 days of completion of case management requirements. The Division shall issue a certificate for three years.

(b) If the application is denied the individual may file a written appeal within 30 days to the Division Director.

(5) Each certified case manager is required to complete and document eight hours of continuing education (CEU) credits each calendar year related to mental health or substance abuse topics.

(a) A certified case manager shall submit CEU documentation to the Division when they apply for recertification.

(b) Documents to verify CEU credits include:

(i) a certificate of completion documenting continuing education validation furnished by the presenter:

(ii) a letter of certificate from the sponsoring agency verifying the name of the program, presenter, and number of hours attended and participants; or

(iii) an official grade transcript verifying completion of an undergraduate or graduate course(s) of study.

(6) Certified case managers shall submit the Request for Re-certification and documentation of 24 hours of CEU's 30 days prior to the date of expiration on the initial certificate or re-certification. Failure to submit the Request for Re-certification will result in automatic revocation of the certificate.

(7) Certified case managers shall abide by the Rules of Professional Code of Conduct pursuant to Subsection R495-876(a), the Department of Human Services Provider Code of Conduct Policy.

(a) Each employer shall notify the Division within 30 days, if a certified case manager engages in unprofessional or unlawful conduct.

(b) The Division shall revoke, refuse to certify or renew a certification to an individual who is substantiated to have engaged in unprofessional or unlawful conduct.

(c) An individual who has been served a Notice of Agency Action that the certification has been revoked or will not be renewed may request a Request for Review to the Division Director or designee within 30 days of receipt of notice.

(d) The Division Director or designee will review the findings of the Notice of Agency Action and shall determine to uphold, amend or revise the action of denial or revocation of the certification.

(8) If a certified case manager fails to complete the requirements for CEU's, their certificate will be revoked or allowed to expire and will not be renewed.

(9) If an individual fails the Division examination they must wait 30 days before taking the examination again. The individual may only attempt to pass the examination two times with a twelve-month period.

(10) The case managers certification must be posted and available upon request.

KEY: bed allocations, due process, prohibited items and devices, fees
Date of Enactment or Last Substantive Amendment: [~~March 7, 2005~~]2007
Notice of Continuation: December 11, 2002
Authorizing, and Implemented or Interpreted Law: 62A-12-102; 62A-12-104; 62A-12-209.6(2); 62A-12-283.1(3)(a)(i); 62A-12-283.1(3)(a)(ii); 62A-15-612(2); 62A-15-105(5)

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Public Service Commission, Administration
R746-420
Significant Energy Resource Solicitation Rule

NOTICE OF PROPOSED RULE
(New Rule)
DAR FILE NO.: 29376
FILED: 12/29/2006, 15:30

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this proposed new rule is to establish the procedural and informational requirements for an affected utility's acquisition of a significant energy resource pursuant to the Utah Energy Resource Procurement Act, Sections 54-17-200 through 54-17-203

SUMMARY OF THE RULE OR CHANGE: The proposed new rule sets forth the information which will be submitted by an affected utility to obtain approval of a solicitation for a significant energy resource or to obtain a waiver of a solicitation process, the process or procedure to be followed in the solicitation process, and the qualifications to be, functions of, and how payments will be made to an independent evaluator who may be involved in the proceedings.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 54-17-100 et seq.

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: It is not anticipated that the proposed rule will have any costs or savings effect upon agencies of the State of Utah. Any costs to state agencies are driven by the provisions of the Energy Resource Procurement Act, Section 54-17-100 et seq. and were considered by the Legislature in enacting the Act. The proposed rule specifies the information which the Act contemplated would be submitted by utilities affected by the Act and identifies the procedures that will be followed for agency approval of a utility's request to approve a significant resource solicitation or obtain a waiver of a solicitation. The proposed rule's identification of the qualifications for an independent evaluator, the process by which an independent evaluator will perform its work in relation to a solicitation for or acquisition of a significant energy resource, and how payments will be made to an independent evaluator are not anticipated to result in any cost or savings effect on state agencies beyond those considered by the Legislature in enacting the Act.

❖ LOCAL GOVERNMENTS: There will be no change in costs or savings to local governments as the proposed rule has no provisions affecting any local government activity.

❖ OTHER PERSONS: Although affected utilities will incur costs to comply with the Act, those costs derive from the requirements of the Act and not the proposed rule. The Act requires an affected utility to obtain Commission approval of its acquisition of a significant energy resource and the proposed rule identifies the specific information to be submitted when seeking such approval and the specific steps for the solicitation process that is required by the Act.

COMPLIANCE COSTS FOR AFFECTED PERSONS: As previously explained, there are no anticipated compliance costs arising from the proposed rule beyond costs which were already considered by the Legislature when enacting the Energy Resource Acquisition Act.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The proposed rule, itself, will have no fiscal impact on affected businesses. The fiscal impact which may arise derive from the Act and were considered by the Legislature when enacting the specific provisions of the Act. Ric Campbell, Chairman

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

PUBLIC SERVICE COMMISSION
ADMINISTRATION
HEBER M WELLS BLDG
160 E 300 S
SALT LAKE CITY UT 84111-2316, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Sandy Mooy or Sheri Bintz at the above address, by phone at 801-530-6708 or 801-530-6714, by FAX at 801-530-6796 or 801-530-6796, or by Internet E-mail at smooy@utah.gov or sbintz@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/21/2007

AUTHORIZED BY: Sandy Mooy, Legal Counsel

R746. Public Service Commission, Administration.
R746-420. Requests for Approval of a Solicitation Process.
R746-420-1. General Provisions.

(1) A Soliciting Utility filing for approval of a proposed Solicitation and Solicitation Process in accordance with the Energy Resource Procurement Act (Act) shall file a request for approval of the proposed Solicitation and Solicitation Process (Application) which shall include testimony and exhibits which provide:

(a) A description of the Solicitation Process the Soliciting Utility proposes to use;

(b) A copy of the complete proposed Solicitation with appendices, attachments and draft pro forma contracts if applicable;

(c) Information to demonstrate that the filing complies with the requirements of the Act and Commission rules;

(d) Descriptions of the criteria and the methodology, including any weighting and ranking factors, to be used to evaluate bids;

(e) Information directing parties to all questions and answers regarding the Solicitation and Solicitation Process posted on an appropriate website;

(f) Information on how participants in the pre-issuance Bidders' conference should submit advance written questions to the Soliciting Utility that are to be addressed at the pre-issuance Bidder's conference;

(g) A list of potentially interested parties to whom the Soliciting Utility has sent or will send notices of the filing of the request for approval of the proposed solicitation with the Commission; and

(h) Other information as the Commission may require.

(2) At the time of filing, or earlier if practicable, the Soliciting Utility shall provide to the Independent Evaluator, data, information and models necessary for the Independent Evaluator to analyze and verify the models.

(3) Pre Bid-Issuance Procedures. Prior to applying for approval of a proposed Solicitation:

(a) The Soliciting Utility shall give advance notice to the Commission as soon as practicable that it intends to conduct a Solicitation Process but not later than 60 days prior to the filing of the draft Solicitation and Solicitation Process to enable the Commission to promptly hire an Independent Evaluator.

(b) The Soliciting Utility shall hold a pre-issuance Bidders' conference in Utah, with both in-person and conference call participation at least 15 days prior to the time the Solicitation is filed for approval. Interested persons may attend this conference. The Soliciting Utility shall ensure that all questions and answers, made at the pre-issuance Bidder's conference, are provided or recorded in writing to the extent practicable.

(c) At the pre-issuance Bidder's conference, the Soliciting Utility should describe to the attendees in attendance the process, timeline for Commission review of the draft Solicitation and opportunities for providing input, including sending comments and/or questions to the Independent Evaluator.

(d) No later than the date of filing of the proposed Solicitation, the Soliciting Utility shall issue a notice to potential bidders regarding the timeline for providing comments and other input regarding the draft Solicitation.

(4) Process for Approval of a Solicitation.

(a) Comments on the Soliciting Utility's Application shall be filed with the Commission within 45 days after the filing of the Application. The Independent Evaluator shall provide comments within 55 days after the filing of the Application. The Soliciting Utility shall file reply comments within 65 days after the filing of the Application.

(b) An Approved Solicitation and related documents shall be posted on an appropriate website as determined by the Commission order approving the Solicitation. Notice of the website posting of a Solicitation shall be sent to the potential bidders identified by the Soliciting Utility and as otherwise directed by the Commission.

(c) All material modifications to the terms and schedule of the Approved Solicitation must be approved by the Commission.

R746-420-2. Requests for Waiver of a Solicitation Process.

(1) A Soliciting Utility filing for waiver of the requirements of Section 54-17-201(2) shall file a request for waiver which shall include testimony and exhibits which provide:

(a) An explanation of and the factual basis for the emergency, opportunity or other factors that support the requested waiver;

(b) If the requested waiver is based upon an emergency, evidence establishing the nature and cause of the emergency and an explanation of why the proposed waiver is in the public interest;

(c) If the requested waiver is based upon a time-limited commercial or technical opportunity, evidence establishing the nature of the opportunity and an explanation of why the proposed waiver is in the public interest;

(d) If the requested waiver is based upon other factors, evidence establishing the nature of those factors and an explanation of why the proposed waiver is in the public interest;

(e) Evidence explaining and demonstrating when the Soliciting Utility first became aware of the claimed emergency, opportunity or other factors and how and when it pursued or responded to the same; and

(f) Evidence showing that a waiver of the Solicitation Process is in the public interest.

(2) A Commission order granting a requested waiver of a Solicitation Process shall not constitute and does not determine approval or disapproval of a significant energy resource decision including cost recovery. The Soliciting Utility retains the obligation to file for approval of a significant energy resource decision under Section 54-17-302.

(3) In considering a request for waiver of a solicitation process under Section 54-17-201(3), the Commission may determine whether conditions could reasonably be imposed to provide alternative ratepayer protections in lieu of those otherwise provided by a competitive solicitation process and an Independent Evaluator. Pursuant to Section 54-17-201(3)(c)(ii), the Commission may condition the granting of a waiver on such conditions as the Commission may determine to be just, reasonable and in the public interest. If the Commission determines that insufficient ratepayer protections exist to warrant advance approval under Section 54-17-302, it may deny or condition approval pursuant to Section 54-17-302(6) in such manner as necessary to protect the public interest.

R746-420-3. Solicitation Process.

(1) General Requirements of a Solicitation Process.

(a) All aspects of a Solicitation and Solicitation Process must be fair, reasonable and in the public interest.

(b) A proposed Solicitation and Solicitation Process must be reasonably designed to:

(i) Comply with all applicable requirements of the Act and Commission rules; and

(ii) Be in the public interest taking into consideration:

(A) whether they are reasonably designed to lead to the acquisition, production, and delivery of electricity at the lowest reasonable cost to the retail customers of the Soliciting Utility located in this state,

(B) long-term and short-term impacts,

(C) risk,

(D) reliability,

(E) financial impacts on the Soliciting Utility,

(F) and other factors determined by the Commission to be relevant.

(iii) A Solicitation and Solicitation Process shall be sufficiently flexible to permit the evaluation and selection of those resources or combination of resources determined by the Commission to be in the public interest.

(iv) A Solicitation and Solicitation Process shall be designed to solicit a robust set of bids to the extent practicable.

(v) A Solicitation Process shall be commenced sufficiently in advance of the time of the projected resource need to permit and facilitate compliance with the Act and the Commission rules and a reasonable evaluation of resource options that can be available to fill the projected need and that will satisfy the criteria contained within Section 54-17-302(3)(c). The utility may request an expedited review of the proposed Solicitation and Solicitation Process if changed circumstances or new information require a different acquisition timeline. The Soliciting Utility must demonstrate to the Commission that the timing of the Solicitation Process will nevertheless satisfy the criteria established in the Act and in Commission rules.

(2) Screening Criteria - Screening in A Solicitation Process.

(a) In preparing a Solicitation and in evaluating bids, the Soliciting Utility shall develop and utilize, in consultation with the Independent Evaluator (if then under contract) and the Division of Public Utilities, screening and evaluation criteria, ranking factors and evaluation methodologies that are reasonably designed to ensure that the Solicitation Process is fair, reasonable and in the public interest.

(b) Reasonable initial screening criteria may include, but are not necessarily limited to, reasonable and nondiscriminatory evaluation of and initial rankings based upon the following factors:

(i) Cost to utility ratepayers;

(ii) Timing of deliveries;

(iii) Point of delivery;
(iv) Dispatchability/flexibility;
(v) Credit requirements;
(vi) Level of change to pro forma contracts included in an approved Solicitation Process;
(vii) Transmission, Interconnection and Integration costs;
(viii) Commission-approved consideration of impacts of direct or inferred debt;
(ix) Feasibility, including project timing and the process for obtaining necessary rights and permits;
(x) Adequacy and flexibility of fuel supplies;
(xi) Choice of cooling technology and adequacy of water resources;
(xii) Systemwide benefits of transmission infrastructure investments associated with a project;
(xiii) Allocation of project development risks, including capital cost overruns, fuel price risk and environmental regulatory risk among project developer, utility and ratepayers; and
(xiv) Environmental impacts.
(c) In developing the initial screening and evaluation criteria, the Soliciting Utility, in consultation with the Independent Evaluator (if then under contract) and the Division of Public Utilities, shall consider the assumptions included in the Soliciting Utility's most recent Integrated Resource Plan (IRP), any recently filed IRP Update, any Commission order on the IRP or IRP Update and in its Benchmark Option.
(d) The Soliciting Utility may but is not required to consider non-conforming bids to the Request For Qualifications (RFQ) or Request For Proposals (RFP). The Soliciting Utility will provide advance notice to the Independent Evaluator of its decision to accept or, to reject non-conforming bids.
(3) Screening Criteria - Request for Qualifications and Request of Proposals.
(a) Prior to the deadline for responding to the RFP, the Soliciting Utility may utilize a RFQ.
(b) The Independent Evaluator, if directed by the Commission to do so, will provide each of the bidders with a Bid number once the Soliciting Utility, in consultation with the Independent Evaluator, has determined that the bidder has met the criteria under the RFQ.
(c) Reasonable RFQ screening criteria may include, but are not necessarily limited to, reasonable and nondiscriminatory evaluation of the following factors:
(i) Credit requirements and risk;
(ii) Non-performance risk;
(iii) Technical experience;
(iv) Technical and financial feasibility; and
(v) Other reasonable screening criteria that are applied in a fair, reasonable and nondiscriminatory manner.
(d) The RFQ should instruct each potential bidder to state in its RFQ response whether it is an affiliate of the Soliciting Utility or will contract with an affiliate of the Soliciting Utility.
(4) Disclosures. If a Solicitation includes a Benchmark Option, the Solicitation shall include at least the following information and disclosures:
(a) Whether the Benchmark Option will or may consist of a Soliciting Utility self-build or owned option (Owned Benchmark Resource) or if it is a purchase option (Market Benchmark Resource).
(b) If an Owned Benchmark Option is used, the engineering specifications, fuel type, technology, efficiency, location, projected life, transmission requirements and operating and dispatch characteristics of the Owned Benchmark Option. If a Market Benchmark Option is used, the Soliciting Utility must disclose that a market option will be utilized and any inputs that will be utilized in the evaluation.
(c) A description and examples of the manner in which resources of differing characteristics or lengths will be evaluated.
(d) That bids will receive Bid numbers from the Independent Evaluator, if directed by the Commission. The blinded personnel will not have access to any information concerning the relationship between the Bid numbers and the Blinded bids until after selection of the final short list.
(e) Assurances that resource evaluations will be conducted in a fair and non-preferential manner in comparison to the Benchmark Option.
(f) Assurances that the Benchmark Option will be validated by the Independent Evaluator and that no changes to any aspect of the Benchmark Option will be permitted after the validation of the Benchmark Option by the Independent Evaluator and prior to the receipt of bids under the RFP and that the Benchmark Option will not be subject to change unless updates to other bids are permitted.
(g) Assurances that the non-blinded personnel will not share any non-blinded information about the bidders with employees or agents of a Soliciting Utility or its affiliates who are or may be involved in the development of a Solicitation, the evaluation of bids, or the selections of resources (Evaluation Team) until after selection of the final shortlist.
(5) Disclosures Regarding Evaluation Methodology. A Solicitation shall include a clear and complete description and explanation of the methodologies to be used in the evaluation and ranking of bids, including a complete description of:
(a) All evaluation procedures, factors and weights to be considered in the RFQ, initial screening and final evaluation of bids;
(b) Credit and security requirements;
(c) Pro forma power purchase and other agreements; and
(d) The Solicitation schedule.
(6) Disclosures Regarding Independent Evaluator. The Solicitation shall describe the Independent Evaluator's role in a manner consistent with Section 54-17-203, including:
(a) An explanation of the role of the Independent Evaluator;
(b) Contact information for the Independent Evaluator;
(c) Directions and encouragement for potential bidders to contact the Independent Evaluator with any questions, comments, information or suggestions.
(7) General Requirements. The Solicitation Process must:
(a) Satisfy all applicable requirements of the Act and Commission rules and be fair, reasonable and in the public interest;
(b) Clearly describe the nature and all relevant attributes of the requested resources;
(c) Include clear descriptions of the amounts and types of resources requested, the required timing of deliveries, acceptable places of delivery, pricing options, transmission constraints, requirements and costs that are known at the time, scheduling requirements, qualification requirements, bid and selection formats and procedures, price and non-price factors and weights, credit and security requirements and all other information reasonably necessary to facilitate a Solicitation Process in compliance with the Act and Commission rules;
(d) Utilize an evaluation methodology for resources of different types and lengths which is fair, reasonable and in the public interest and which is validated by the Independent Evaluator;

(e) Ensure that bidders will timely receive the data and information determined by the Soliciting Utility, in consultation with the Independent Evaluator or as directed by the Commission, to be necessary to facilitate a fair and reasonable competitive bidding process and all information reasonably requested by bidders;

(f) Impose credit requirements and other participation and bidding requirements that are non-discriminatory, fair, reasonable, and in the public interest;

(g) Permit a range of commercially reasonable alternatives to satisfy credit and security requirements, such as bonds, letters of credit, liens, options to purchase upon default and rights of first refusal;

(h) Permit and encourage negotiation with final short-list bidders for the benefit of ratepayers taking into account increased value but also not unreasonably increasing risks to ratepayers;

(i) Provide reasonable protections for confidential information of bidders; subject to disclosure pursuant to appropriate protective order to the Independent Evaluator and otherwise as required by the Commission;

(j) Provide reasonable protections for confidential information of the Soliciting Utility, subject to disclosure pursuant to appropriate protective order to the Independent Evaluator and otherwise as required by the Commission.

(k) Ensure that if any information that may affect the Solicitation Process is to be shared by the Soliciting Utility with any bidder or with the employees or agents of a Soliciting Utility or its affiliates who may be involved in the development or submission of a Benchmark Option used in a Solicitation (Bid Team), excluding confidential, proprietary or competitively sensitive Benchmark- or bid-specific information or negotiations, that the same information is shared with all bidders in the same manner and at the same time.

(8) Process Requirements for Benchmark Option. In a Solicitation Process involving the possibility of a Benchmark Option:

(a) The Evaluation Team, including non-blinded personnel, may not be members of the Bid Team, nor communicate with members of the Bid Team during the Solicitation Process about any aspect of the Solicitation Process, except as authorized herein.

(b) The names and titles of each member of the Bid Team, the non-blinded personnel and Evaluation Team shall be provided in writing to the Independent Evaluator.

(c) The Evaluation Team may solicit written comments on matters of technical expertise from the members of the Bid Team. All such communications to or from the Bid Team must be in writing. The Independent Evaluator must participate in all such communications between members of the Bid Team and Evaluation Team and must retain a copy of all such correspondence to be made available in future Commission proceedings. The Independent Evaluator must also make available to the bidder about whose bid the Bid Team's technical expertise was sought a written copy of the correspondence between the Evaluation and Bid Teams. Any response to such correspondence from the bidder must be in writing to the Independent Evaluator and must be conveyed to the Evaluation Team. The Independent Evaluator must provide its own or third party verification of the reasonableness of any technical information solicited from the Bid Team or bidder before it may be used in any evaluation.

(d) There shall be no communications regarding blinded bid information, either directly or indirectly, between the non-blinded personnel and other Evaluation Team members until the final shortlist is determined except as authorized herein, which communications shall be done in the presence of the Independent Evaluator. The non-blinded personnel must not reveal to other Evaluation Team members, either directly or indirectly in any form, any blinded information regarding the identity of any of the bidders.

(e) The Evaluation Team shall have no direct or indirect contact or communication with any bidder other than through the Independent Evaluator until such time as a final shortlist is selected by the Soliciting Utility.

(f) Each member of the Bid Team and Evaluation Team, including non-blinded personnel, shall promptly execute a commitment and acknowledgment that he or she agrees to abide by all of the restrictions and conditions contained in these Commission rules. Following completion of the Solicitation Process, each member of the Bid Team and Evaluation Team, including non-blinded personnel, shall promptly execute an acknowledgment certifying that he or she fully complied and satisfied all such restrictions and conditions. These acknowledgments shall be filed with the Commission within 10 days of their execution.

(g) Should any bidder or a member of the Bid Team attempt to contact a member of the Evaluation Team, such bidder or member of the Bid Team shall be directed to the Independent Evaluator for all information and such communication shall be reported to the Independent Evaluator by the Evaluation Team within seven business days.

(h) All relevant costs and characteristics of the Benchmark Option must be audited and validated by the Independent Evaluator prior to receiving any of the bids and are not subject to change during the Solicitation except as provided herein.

(i) All bids must be considered and evaluated against the Benchmark Option on a fair and comparable basis.

(j) Environmental risks and weight factors must be applied consistently and comparably to all bid responses and the Benchmark Option.

(k) The Solicitation must allow power purchase contract terms equivalent to the projected facility life of the Benchmark Option. The Commission may waive this requirement during review of the draft Solicitation and Solicitation Process for good cause shown.

(l) If the Soliciting Utility is subject to regulation in more than one state concerning the acquisition, construction, or cost recovery of a significant energy resource, the Soliciting Utility shall explain the degree to which it has taken into account the likelihood of resource approval and cost recovery in other jurisdictions in exercising its judgment in selecting the Benchmark Option.

(9) Issuance of A Solicitation.

(a) The Soliciting Utility shall issue the approved Solicitation promptly after Commission approval of the Solicitation and Solicitation Process.

(b) Bidders shall be directed to submit bids directly to the Independent Evaluator in accordance with the schedule contained in the Solicitation.

(c) The Soliciting Utility shall hold a pre-Bid conference in Utah, with both in-person and conference call participation available, at least 30 days before the deadline for submitting responsive bids.

(10) Evaluation of Bids.

(a) The Independent Evaluator, if directed by the Commission, shall "blind" all bids and supply blinded bids to the Soliciting Utility and make blinded bids available to the Division subject to the provisions of an appropriate Commission-issued protective order.

(b) The Independent Evaluator shall supply such information regarding bidders and bids to non-blinded personnel as is necessary

to enable such personnel to complete required credit and legal evaluations.

(c) The Soliciting Utility must cooperate fully with the Independent Evaluator.

(d) Subject to an appropriate confidentiality agreement approved by the Commission, the Soliciting Utility shall timely provide to the Independent Evaluator and the Division of Public Utilities full access to all relevant personnel of the Soliciting Utility, together with all data, materials, models and other information, including confidential information and forward pricing curves, used or to be used in developing the proposed Solicitation, preparing the Benchmark Option, or screening, evaluating or selecting bids.

(e) The Soliciting Utility, monitored by the Independent Evaluator, shall conduct a thorough evaluation of all bids in a manner consistent with the Act, Commission Rules and the Solicitation.

(f) The Independent Evaluator shall pursue a reasonable combination of auditing the Soliciting Utility's evaluation and conducting its own independent evaluation, in consultation with the Division of Public Utilities, such that the Independent Evaluator can fulfill its duties and obligations as set forth in the Act and in Commission Rules.

(g) The Soliciting Utility, the Division of Public Utilities and the Independent Evaluator may request further information from any bidder. Any communications with bidders in this regard shall be conducted only through the Independent Evaluator. The Soliciting Utility shall be informed in a timely manner of the content of any communications between the Independent Evaluator and a bidder, but communications shall be conducted on a confidential or blinded basis.

(h) In order to facilitate both an independent evaluation function and an auditing function, the Independent Evaluator shall have access to all information and resources utilized by the Soliciting Utility in conducting its analyses. The Soliciting Utility shall provide the Independent Evaluator with complete and open access to all documents, information, data and models utilized by the Soliciting Utility in its analyses. The Independent Evaluator shall be allowed to actively and contemporaneously monitor all aspects of the Soliciting Utility's evaluation process in the manner it deems appropriate so that the Soliciting Utility's evaluation process is transparent to the Independent Evaluator. The Soliciting Utility shall have an affirmative responsibility to respond promptly and fully to any request for reasonable access or information made by the Division of Public Utilities or the Independent Evaluator. To the extent the Independent Evaluator determines through its audit or independent evaluation that its evaluation and the Soliciting Utility's yield different results, the Independent Evaluator shall notify the Soliciting Utility and the Division of Public Utilities and attempt to identify reasons for the differences as early as practicable. Where practicable, the Soliciting Utility, the Division and the Independent Evaluator shall attempt to reconcile such differences. If the differences cannot be reconciled to the Independent Evaluator's satisfaction, the Independent Evaluator will promptly notify the Commission.

(i) The Independent Evaluator, if directed by the Commission, shall be responsible for unblinding all bids included on the final short-list and providing relevant contact information to the Soliciting Utility for final negotiations with these short-listed bidders. The Independent Evaluator may monitor any negotiations with short-listed bidders.

(j) The Division of Public Utilities and the Independent Evaluator may, through the Independent Evaluator, ask the PacifiCorp Transmission group to conduct reasonable and necessary transmission analyses concerning bids received. Any such analyses shall be provided to the Division of Public Utilities, the Independent Evaluator and the Soliciting Utility. The Soliciting Utility may, in a general rate case or other appropriate Commission proceeding, include and the Commission will allow, recovery in the Soliciting Utility's retail rates of any reasonable amounts paid by the Soliciting Utility for those analyses.

R746-420-4. Qualifications of Independent Evaluator.

(1) An Independent Evaluator must:

(a) Demonstrate qualifications, expertise and experience to perform all of the functions of the Independent Evaluator as contemplated by the Act and Commission rules;

(b) Demonstrate independence from the Soliciting Utility and potential bidders identified by the utility or determined by the Commission;

(c) Be experienced and competent to facilitate necessary communications, including operation and control of a website for all purposes contemplated by Commission rules;

(d) Provide statements of interest to the Commission which disclose:

(i) any contracts or other economic arrangements of any kind between the Soliciting Utility or likely bidders and the Independent Evaluator or any affiliates that currently exist, that have existed within the past ten years, or that have been promised or are expected in the future and

(ii) memberships in trade organizations; and

(e) File with the Commission a full copy of any agreement of any type between the Independent Evaluator and the Soliciting Utility or any likely bidder or any affiliates.

(2) While performing services related to the Solicitation, the Independent Evaluator shall not accept employment from nor communicate with bidders and the Soliciting Utility regarding future employment or contract opportunities.

R746-420-5. Payments to Independent Evaluator.

(1) Payments to the Independent Evaluator selected by the Commission shall be paid by the Soliciting Utility in accordance with terms and conditions specified by the Commission.

(a) The Commission and the Independent Evaluator shall execute a contract approved by the Commission with such terms and conditions as the Commission may approve.

(b) Invoices for the Independent Evaluator's services shall be sent as directed on contact.

(c) After an invoice is reviewed and approved, it will be forwarded to the Soliciting Utility for payment to the Independent Evaluator.

(d) Unless the Commission directs otherwise in connection with a Solicitation, the expenses of the Independent Evaluator shall be reimbursed as follows:

(i) The Soliciting Utility is authorized to collect bid fees that are reasonable under the circumstances of up to $10,000 per bid to defray costs of the Independent Evaluator; and

(ii) The Soliciting Utility may, in a general rate case or other appropriate Commission proceeding, include and the Commission will allow, recovery in the Soliciting Utility's retail rates of any additional amounts paid by the Soliciting Utility for the Independent Evaluator.

R746-420-6. Functions of Independent Evaluator.

(1) The Independent Evaluator shall perform all functions contemplated by the Act or Commission rules, in coordination with and under the contract with the Commission.

(2) The functions of the Independent Evaluator may include the following:

(a) Facilitate and monitor communications between the Soliciting Utility and bidders.

(b) Review and validate the assumptions and calculations of any Benchmark Option.

(c) Analyze the Benchmark Option for reasonableness and consistency with the Solicitation Process.

(d) Analyze, operate and validate all important models, modeling techniques, assumptions and inputs utilized by the Soliciting Utility in the Solicitation Process, including the evaluation of bids.

(e) Receive and "blind" bid responses.

(f) Provide input to the Soliciting Utility on:

(i) the development of screening and evaluation criteria, ranking factors and evaluation methodologies that are reasonably designed to ensure that the Solicitation Process is fair, reasonable and in the public interest in preparing a Solicitation and in evaluating bids;

(ii) the development of initial screening and evaluation criteria that take into consideration the assumptions included in the Soliciting Utility's most recent IRP, any recently filed IRP Update, any Commission order on the IRP or IRP Update and in its Benchmark Optio;

(iii) whether a bidder has met the criteria specified in any RFQ and whether to reject or accept non-conforming RFQ responses;

(iv) whether and when data and information should be distributed to bidders because it is necessary to facilitate a fair and reasonable competitive bidding process or has been reasonably requested by bidders;

(v) other matters as appropriate in performing the duties of the Independent Evaluator under the Act and Commission rules, or as directed by the Commission.

(g) Ensure that all bids are treated in a fair and non-discriminatory manner.

(h) Monitor, observe, validate and offer feedback to the Soliciting Utility, the Commission, and the Division of Public Utilties on all aspects of the Solicitation and Solicitation Process, including:

(i) content of the Solicitation;

(ii) evaluation and ranking of bid responses;

(iii) creation of a short list(s) of bidders for more detailed analysis and negotiation;

(iv) post-Bid discussions and negotiations with, and evaluations of, short list bidders; and

(v) negotiation of proposed contracts with successful bidders.

(i) Offer feedback to the Soliciting Utility on possible adjustments to the scope or nature of the Solicitation or requested resources in light of bid responses.

(j) Solicit additional information on bids necessary for screening and evaluation purposes.

(k) Advise the Commission at all stages of the process of any unresolved disputes or other issues or concerns that could affect the integrity or outcome of the Solicitation Process.

(l) Analyze and attempt to mediate disputes that arise in the Solicitation Process with the Soliciting Utility and/or bidders, and present recommendations for resolution of unresolved disputes to the Commission.

(n) Participate in and testify at Commission hearings on approval of the Solicitation and Solicitation Process and/or approval of a Significant Energy Resource Decision.

(m) Coordinate as appropriate and as directed by the Commission with staff or evaluators designated by regulatory authorities from other states served by the Soliciting Utility.

(o) Perform such other evaluations and tasks as the Commission may direct.

(p) At the request of the Commission and subject to the existence or negotiation of appropriate contractual arrangements, participate in the evaluation of a request for an Order to Proceed under Section 54-17-304 and testify at any Commission hearings regarding the same.

(3) Communications

(a) Communications between a Soliciting Utility and potential or actual bidders shall be conducted only through or in the presence of the Independent Evaluator. Bidder questions and Soliciting Utility or Independent Evaluator responses shall be posted on an appropriate website. The Independent Evaluator shall protect or redact competitively sensitive information from such questions or responses to the extent necessary.

(b) The Soliciting Utility may not communicate with any bidder regarding the Solicitation Process, the content of the Solicitation or Solicitation documents, or the substance of any potential response by a bidder to the Solicitation, except through or in the presence of the Independent Evaluator.

(c) The Soliciting Utility shall provide timely and accurate responses to any request from the Independent Evaluator, including requests from bidders submitted by the Independent Evaluator, for information regarding any aspect of the Solicitation or the Solicitation Process.

(4) Reports

(a) The Independent Evaluator shall prepare at least the following confidential reports and provide them to the Commission, the Division of Public Utilities and the Soliciting Utility:

(i) Monthly progress reports on all aspects of the Solicitation Process as it progresses;

(ii) Final Reports as soon as possible following the completion of the Solicitation Process. Final reports shall include analyses of the Solicitation, the Solicitation Process, the Soliciting Utility's evaluation and selection of bids and resources, the final results and whether the selected resources are in the public interest;

(iii) Other reports the Independent Evaluator deems appropriate; and

(iv) Other reports as the Commission may direct.

(b) The Independent Evaluator shall prepare at least the following public reports and provide them to the Regulators and all Interested Parties:

(i) Final report, without confidential information, analyzing the Solicitation, the Solicitation Process, the Soliciting Utility's evaluation and selection of bids and resources, the final results and whether the selected resources are in the public interest;

(ii) Comments and recommendations with respect to changes or improvements for a future Solicitation Process; and

(iii) Other reports as the Commission may direct.

(c) Upon advance notice to the Soliciting Utility, the Independent Evaluator may conduct meetings with intervenors during the Solicitation Process to the extent determined by the Independent Evaluator or as directed by the Commission.

(d) If at any time the Independent Evaluator becomes aware of any violation of any requirements of the Solicitation Process or Commission rules, the Independent Evaluator shall immediately notify the Soliciting Utility and the Commission. The Independent Evaluator shall report any actions taken by the Soliciting Utility and any other recommended remedies to the Commission.

(e) The Independent Evaluator shall document all substantive correspondence and communications with the Soliciting Utility and bidders, shall make such documentation available to parties in any relevant proceedings upon proper request and subject to the terms of a protective order if the request contains or pertains to confidential information. Within six months after the end of the Solicitation Process, the Independent Evaluator shall provide a copy of this documentation to the Soliciting Utility. The Soliciting Utility shall retain such documentation for a period of at least 10 years.

KEY: significant energy resource, solicitation process, order to proceed, filing requirements
Date of Enactment Last Substantive Amendment: 2007
Authorizing and Implemented or Interpreted Law: 54-17-100 et seq.

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Public Service Commission, Administration
R746-430
Action Plan and Significant Energy Resource Decision Rule

NOTICE OF PROPOSED RULE
(New Rule)
DAR FILE NO.: 29377
FILED: 12/29/2006, 15:31

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this proposed new rule is to establish the procedural and informational requirements for review of a utility's action plan, for approval of significant energy resource decision, and when seeking an order to proceed with an approved significant energy resource decision pursuant to the Energy Resource Procurement Act, Sections 54-17-301 through 54-17-304.

SUMMARY OF THE RULE OR CHANGE: The proposed rule identifies how the Commission will review and provide guidance on a utility's action plans. The proposed rule sets forth the information which will be submitted by an energy utility to obtain approval of a significant energy resource decision and the process or procedure to be followed in the approval or order to proceed processes.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 54-17-100 et seq.

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: It is not anticipated that the proposed rule will have any costs or savings effect upon state agencies. Any costs to state agencies are driven by the provisions of the Energy Resource Procurement Act, Section 54-17-100 et seq. and were considered by the Legislature in enacting the Act. The proposed rule specifies the specific information which the Act contemplated would be submitted by utilities affected by the Act and identifies the specific procedures that should be followed for agency approval of a utility's request to approve a resource decision or obtain an order to proceed with an approved resource decision.

❖ LOCAL GOVERNMENTS: There will be no change in costs or savings to local governments as the proposed rule has no provisions affecting any local government activity.

❖ OTHER PERSONS: Although affected utilities will incur costs to comply with the Act, costs derive from the requirements of the Act and not the proposed rule. The Act allows a utility to seek Commission approval of its resource decision or an order to proceed with the implementation of an approved resource decision. The proposed rule identifies the specific information to be submitted when seeking such approval or order to proceed and the procedural steps for proceedings before the Commission.

COMPLIANCE COSTS FOR AFFECTED PERSONS: As explained previously, there are no anticipated compliance costs arising from the proposed rule beyond costs which were already considered by the Legislature when enacting the Energy Resource Procurement Act.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The proposed rule, itself, will have no fiscal impact on affected businesses. The fiscal impact which may arise derive from the Act itself and were considered by the Legislature when enacting the specific provisions of the Act. Ric Campbell, Chairman

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

PUBLIC SERVICE COMMISSION
ADMINISTRATION
HEBER M WELLS BLDG
160 E 300 S
SALT LAKE CITY UT 84111-2316, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Sheri Bintz or Sandy Mooy at the above address, by phone at 801-530-6714 or 801-530-6708, by FAX at 801-530-6796 or 801-530-6796, or by Internet E-mail at sbintz@utah.gov or smooy@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/21/2007

AUTHORIZED BY: Sandy Mooy, Legal Counsel

R746. Public Service Commission, Administration.
R746-430. Procedural and Informational Requirements for Review of Utility's Action Plan.
R746-430-1. Definitions.

Definition: "Action Plan" means a plan, prepared or updated in anticipation of the acquisition of the Affected Utility's significant energy resource(s) under the Energy Resource Procurement Act, Utah Code Title 54 Chapter 17, outlining actions and specific resource decisions intended to implement an Affected Utility's Integrated Resource Plan consistent with the utility's strategic business plan.

(1) Filing of an Action Plan - As soon as practicable after development of its Integrated Resource Plan or as part of the development of an Integrated Resource Plan, each Affected Utility shall file with the Commission an Action Plan. The Affected Utility shall include with the Action Plan the following:

(a) Information showing the Affected Utility's analysis and conclusions by which it identified and selected the actions and significant energy resources which will be pursued through the Action Plan consistent with the Energy Resource Procurement Act, Utah Code Title 54, Chapter 17.

(b) Identification of the Integrated Resource Plan used in the development of the Action Plan, including information showing how the Action Plan is consistent with the Integrated Resource Plan or why deviations have been made.

(c) All data, models and information used to develop the Action Plan, including, but not limited to, the Affected Utility's costs, risk and scenario analysis, methodologies and assumptions used.

(d) Identification of the means, whether included or not included in the Action Plan, by which the Affected Utility may enable changes to the actions and significant energy resource(s) pursued through the Action Plan, which changes may be warranted as the Affected Utility prepares and pursues future Integrated Resource Plans or may revise actions and significant energy resources in future Action Plans.

(2) Procedure on an Action Plan - Upon the filing of an Action Plan.

(a) The Commission shall set and give notice of a scheduling conference to set a schedule which will identify the time period during which interested parties may obtain information to prepare comments on the Action Plan, set the date upon which comments shall be provided to the Commission and other interested parties, and set a date upon which reply comments may be made to the comments previously filed.

(b) The Commission may, but is not required to, hold hearings in connection with the Action Plan for the purpose of the Commission's review and guidance.

(3) Affect of Review or Guidance - Nothing in these rules requires any acknowledgment, acceptance or order pertaining to the Action Plan submitted. Any review or guidance provided by the Commission shall not be binding on the Affected Utility and shall not be construed as approval of any action or resource identified in the Action Plan. The Affected Utility's response to any Commission review or guidance may be considered by the Commission in connection with any other request or filing made by the Affected Utility under the Energy Resource Procurement Act, Utah Code Title 54, Chapter 17.

R746-430-2. Approval of a Significant Energy Resource.

(1) Filing Requirements - When an Affected Utility files a request to approve a Significant Energy Resource pursuant to Section 54-17-302, the utility shall include with its request the following:

(a) Information to demonstrate the utility has complied with the requirements of the Energy Resource Procurement Act and Commission rules.

(b) Information to demonstrate whether approval of the selected Significant Energy Resource is in the public interest.

(c) Information regarding the solicitation process, if the Significant Energy Resource was solicited through a solicitation process, including, but not limited to:

(i) Summaries of all bids received,

(ii) Summaries of the Affected Utility's rankings and evaluations of bids,

(iii) Copies of all reports relating to the solicitation process made by an independent evaluator who may have been involved with the solicitation process,

(iv) Copies of all solicitation documents, and

(v) Signed acknowledgments from utility personnel and the utility's contractors' employees, if any, involved in the solicitation that they fully observed and complied with the requirements of the Commission's rules or statutes applicable to the solicitation process.

(d) All information, data, models and analyses used by the Affected Utility to evaluate the acquisition of the Significant Energy Resource if the acquisition is pursuant to Section 54-17-201(3), or to evaluate and rank bids and the selected resource, if the acquisition is by a solicitation process pursuant to Section 54-17-201(2).

(e) Contracts proposed for execution or use in connection with the acquisition of the Significant Energy Resource and identification of matters for which contracts are being negotiated or remain to be negotiated.

(f) Information on the estimated costs for the Significant Energy Resource, including but not limited to engineering studies, data, and models used in the analysis, and any other costs which the utility considers recoverable pursuant to Section 54-17-303.

(g) An analysis of the estimated effects the Significant Energy Resource will have on the Affected Utility's revenue requirement.

(h) Financial information demonstrating adequate financial capability to obtain the Significant Energy Resource pursuant to the proposed acquisition.

(i) A Proposed Protective Order, using the Commission's standard Protective Order, which may be used to facilitate access to information which may be claimed as confidential or protected.

(2) Procedure to Approve a Significant Energy Resource and Its Acquisition -

(a) If the Affected Utility is contemplating acquiring a Significant Energy Resource through a solicitation process, after it has completed its evaluation of bids but prior to filing a request to approve a Significant Energy Resource, the utility shall provide a written notification to the Commission of the Significant Energy Resources it has selected from the bids and the reasoning for the utility's selection of those resources.

(b) The Affected Utility may negotiate a proposed final agreement for the acquisition of the proposed Significant Energy Resource at any time, however, any such agreement shall be

expressly conditional on the final decision of the Commission in the approval proceeding.

(c) The Affected Utility shall file a request for approval of a Significant Energy Resource as soon as practicable after completion of the utility's decision to select the resource.

(i) Prior to filing the request for approval of a Significant Energy Resource, the Affected Utility shall provide public notice of its intent to file the request and seek approval of the Significant Energy Resource from the Commission.

(ii) After the filing of the request, the Commission will schedule and provide notice of a Scheduling Conference to set a schedule for the proceedings, including a public hearing, through which it will consider the requested approval of the Significant Energy Resource.

(d) Any agreement for the acquisition of a Significant Energy Resource shall be submitted to the Commission for approval. The Commission will set a schedule to accept comments and reply comments from interested persons and the Affected Utility concerning whether the agreement complies with any Commission orders or Commission conditions relating to the Significant Energy Resource which will be acquired through the agreement.

(e) The Affected Utility shall maintain a complete record of all materials submitted in response to discovery requests and all documents submitted to the Commission during any proceedings to approve a Significant Energy Resource and its acquisition for at least ten years after the date of a Commission order approving an agreement to acquire the Significant Energy Resource.

R746-430-3. Requests for a Determination of Whether to Proceed with an Approved Significant Energy Resource In the Event of Change in Circumstances or Costs.

(1) Filing of a Request - When an Affected Utility seeks a Commission review and determination, pursuant to Section 54-17-304, of whether it should proceed with an approved Significant Energy Resource decision, the utility shall file with its request the following:

(a) Information concerning the nature and cause of the change of circumstances or projected costs, including, but not limited to, when and how the Affected Utility became aware of the change of circumstances or projected costs and any actions it has taken.

(b) Information concerning all costs incurred by the utility or to be incurred by the utility if the Commission determines that the utility should not proceed with the approved Significant Energy Resource, including those for which the utility anticipates it will seek future recovery pursuant to Section 54-17-304(4).

(c) Information concerning the utility's expectations concerning costs, timing and other aspects of an Approved Energy Resource if the utility were to proceed with its acquisition with the changed circumstances or projected costs. This information shall also include proposed contracts or contract amendments, if any, to be used in the event the utility were to proceed with the Significant Energy Resource.

(d) The utility's conclusions and recommendations on whether it would or would not be in the public interest to proceed with the Approved Energy Resource, and all information, data, models and analyses used in arriving at the utility's conclusions and recommendations.

(e) Information concerning any alternatives which the utility considered to meet the needs or purposes for which the Approved Energy Resource is intended in the utility's own analysis of whether or not to proceed with the Approved Energy Resource, including, but not limited to, all data, models, and analyses used by the utility.

(f) A Proposed Protective Order, using the Commission's standard Protective Order, which may be used to facilitate access to information which may be claimed as confidential or protected.

(2) Procedure on a Request for a Commission Review and Determination on Whether to Proceed-

(a) The Affected Utility shall give notice of the filing of its request to all parties who participated in the Commission proceedings by which the Significant Energy Resource was approved, individuals who have requested notification of such requests, and, additionally, as directed by the Commission.

(b) The Commission shall set and give notice of a scheduling conference by which it will set a schedule which will identify the time period, if any, during which interested persons may obtain information to prepare comments on the request, set the date upon which comments shall be provided to the Commission and other interested persons, and set a date upon which reply comments may be made to the comments previously filed. The Commission may, but is not required to, set a date for a public hearing on the request.

(c) The Affected Utility shall maintain a complete record of all materials developed for or used in connection with its request for a period of ten years from the date the Commission issues an order on its request.

KEY: action plan, significant energy resource, order to proceed, utilities
Date of Enactment or Last Substantive Amendment: 2007
Authorizing, and Implemented or Interpreted Law: 54-17-100 et seq.

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Public Service Commission, Administration
R746-440
Significant Energy Resource Solicitation

NOTICE OF PROPOSED RULE
(New Rule)
DAR FILE NO.: 29378
FILED: 12/29/2006, 15:33

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this new rule is to establish the procedural and informational requirements for approval of a utility's resource decision or when seeking an order to proceed with an approved resource decision pursuant to Utah Code Sections 54-17-401 through 54-17-404.

SUMMARY OF THE RULE OR CHANGE: The proposed new rule sets forth the information which will be submitted by a utility to obtain approval of a resource decision or to proceed with an approved resource decision and the process or procedure to be followed in the approval or order to proceed process.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 54-17-100 et seq.

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: It is not anticipated that the proposed rule will have any costs or savings effect upon state agencies. Any costs to state agencies are driven by the provisions of the Energy Resource Procurement Act and were considered by the Legislature in enacting the Act. The proposed rule specifies the information which the Act contemplated would be submitted by utilities affected by the Act and identifies the procedures that should be followed for agency approval of a utility's request to approve a resource decision or obtain an order to proceed with an approved resource decision.

❖ LOCAL GOVERNMENTS: There will be no change in costs or savings to local governments as the proposed rule has no provisions affecting any local government activity.

❖ OTHER PERSONS: Although affected utilities will incur costs to comply with the Act, costs derive from the requirements of the Act and not the proposed rule. The Act allows a utility to seek Commission approval of its resource decision or an order to proceed with implementation of an approved resource decision. The proposed rule identifies the specific information to be submitted when seeking such approval or order to proceed and the procedural steps for proceedings before the Commission.

COMPLIANCE COSTS FOR AFFECTED PERSONS: As explained, there are no anticipated compliance costs arising from the proposed rule beyond costs from the Act itself and which were considered by the Legislature when enacting the specific provisions of the Act.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: The proposed rule, itself, will have no fiscal impact on affected businesses. The fiscal impact which may arise derives from the Act and were considered by the Legislature when enacting the Act. Ric Campbell, Chairman

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

PUBLIC SERVICE COMMISSION
ADMINISTRATION
HEBER M WELLS BLDG
160 E 300 S
SALT LAKE CITY UT 84111-2316, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Sheri Bintz or Sandy Mooy at the above address, by phone at 801-530-6714 or 801-530-6708, by FAX at 801-530-6796 or 801-530-6796, or by Internet E-mail at sbintz@utah.gov or smooy@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/21/2007

AUTHORIZED BY: Sandy Mooy, Legal Counsel

R746. Public Service Commission, Administration.
R746-440. Significant Energy Resource Solicitation.
R746-440-1. Filing Requirements for a Request for Approval of a Resource Decision.

(1) A request for approval of a Resource decision shall include testimony and exhibits which provide:

(a) A description of the Resource decision,

(b) Information to demonstrate that the Energy utility has complied with the applicable requirements of the Act and Commission rules,

(c) The purposes and reasons for the Resource decision,

(d) An analysis of the estimated or projected costs of the Resource decision, including the engineering studies, data, information and models used in the Energy utility's analysis,

(e) Descriptions and comparisons of other resources or alternatives evaluated or considered by the Energy utility, in lieu of the proposed Resource decision,

(f) Sufficient data, information, spreadsheets, and models to permit an analysis and verification of the conclusions reached and models used by the Energy utility,

(g) An analysis of the estimated effect of the Resource decision on the Energy utility's revenue requirement,

(h) Financial information demonstrating adequate financial capability to implement the Resource decision,

(i) Major contracts, if any, proposed for execution or use in connection with the Resource decision,

(j) Information to show that the Energy utility has or will obtain any required authorizations from the appropriate governmental bodies for the Resource decision, and

(k) Other information as the Commission may require.

(2) Notice of a request for approval of a Resource decision.

(a) At least five calendar days prior to filing a request for approval of a Resource decision, the Energy utility shall provide public notice of its request for approval of a Resource decision. The public notice shall provide a description of the request and information on how interested persons my obtain, from the Energy utility, further information about the request or a copy of the request.

(b) At least five calendar days prior to filing a request for approval of a Resource decision, the Energy Utility shall inform the Commission of the anticipated filing and the means by which the Energy Utility has made, or will make, the public notice.

(3) Issues regarding the production, treatment and use of materials of a confidential or proprietary nature, including issues regarding who is entitled to review the materials, will be determined by the Commission.

R746-440-2. Process for Approval of a Resource Decision.

(1) Following a filing of a request for approval of a Resource decision:

(a) At a scheduling conference, the Commission will set an intervention deadline and schedule the time for conducting a public hearing on the request. The Commission will issue a Scheduling Order subsequent to the scheduling conference.

(b) The Commission will issue a protective order, to facilitate access to and exchange of information which is claimed to be confidential or of a proprietary nature.

(c) Discovery may commence. Responses to discovery requests shall be made within 21 calendar days after receipt, or as otherwise agreed between the parties or ordered by the Commission.

(d) Delivery of documents may be made by electronic means (e.g., email, disk, facsimile), instead of paper versions, as agreed by the parties or as ordered by the Commission.

(2) The Energy utility shall maintain a complete record of all materials submitted to the Commission and all materials submitted in response to discovery requests during a Resource decision process for 10 years from the date of the Commission's final order in a Resource decision proceeding. A party to a proceeding may petition the Commission to require specified additional materials to be maintained for a specified period.

R746-440-3. Process for Review and Determination of a Request for an Order to Proceed with Implementation of an Approved Resource Decision.

(1) A request for such Commission review and determination shall include testimony and exhibits which provide:

(a) An explanation of the nature and cause of the change in circumstances or projected costs, including how the Energy utility became aware of the change in circumstances or projected cost and any action it has taken,

(b) An explanation of why an Order to Proceed is or is not, in the Energy utility's view, the proper response to the changed circumstances,

(c) The Energy utility's updated projections regarding the impact of the changed circumstances or projected costs on the timing, cost and other aspects of the approved Resource decision,

(d) The costs incurred to date in connection with the Resource decision,

(e) The Energy utility's updated projections of any unavoidable costs if the approved Resource decision is not pursued to completion, and

(f) Major proposed contracts or contract amendments, if any, to be used in the event of an Order to Proceed.

(2) Notice of a request for review and determination of an Order to Proceed shall be provided, by the Energy utility, to all parties in the docket in which the Resource decision was approved and otherwise as determined by the Commission.

(3) The Energy utility shall maintain a complete record of its analyses and evaluations relating to the Order to Proceed, including spreadsheets and models materially relied upon by the utility, all materials submitted to the Commission and all materials submitted in response to discovery requests during a proceeding involving a review and determination for at least 10 years from the date of the Commission's final order in a Commission proceeding for review and determination of an Order to Proceed with Implementation of an approved Resource decision. A party to a proceeding may petition the Commission to require specified additional materials to be maintained for a specified period.

(4) Issues regarding the production, treatment and use of materials of a confidential or proprietary nature, including issues regarding who is entitled to review those materials will be determined by the Commission.

KEY: resource decision, energy utility, filing requirements
Date of Enactment or Last Substantive Amendment: 2007
Authorizing, and Implemented or Interpreted Law: 54-17-100 et seq.

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Science Technology and Research Governing Authority (USTAR), Administration

R856-1-6

Ongoing Funding for Utah Science Technology and Research Innovation Team

NOTICE OF PROPOSED RULE

(Amendment)
DAR FILE NO.: 29375
FILED: 12/29/2006, 13:28

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: This change to Section R856-1-6 was deemed necessary by the Governing Authority to give the Governing Authority Board more options when modifying innovation team budgets.

SUMMARY OF THE RULE OR CHANGE: This rule relates to all funds allocated to Utah Science Technology and Research innovation teams by the Utah Science Technology and Research Governing Authority, specifically when modifying innovation team funding is deemed necessary by the Governing Authority Board.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 63-38g-302(f)

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: There will be no anticipated cost to the state budget as this is an instruction detailing when and how the Utah Science Technology and Research Governing Authority allocates money appropriated to it by the Legislature. Additionally, there will be no savings as this is a new process that will likely have no cost associated with it.

❖ LOCAL GOVERNMENTS: There will be no anticipated cost to local government as this is an instruction detailing when and how the Utah Science Technology and Research Governing Authority allocates money appropriated to it by the Legislature. Additionally, there will be no savings as this is a new process that will likely have no cost associated with it.

❖ OTHER PERSONS: There will be no anticipated cost to other persons as this is an instruction detailing when and how the Utah Science Technology and Research Governing Authority allocates money appropriated to it by the Legislature. Additionally, there will be no savings as this is a new process that will likely have no cost associated with it.

COMPLIANCE COSTS FOR AFFECTED PERSONS: There will be no compliance cost to any affected persons as this is an instruction detailing when and how the Utah Science Technology and Research Governing Authority allocates money appropriated to it by the Legislature. Additionally, there will be no savings as this is a new process that will likely have no cost associated with it.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: As there will be no aggregate anticipated costs or savings to the state budget, local government, or other persons, and no compliance costs for affected persons, we anticipate no fiscal impact on businesses. Ted McAleer, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

SCIENCE TECHNOLOGY AND RESEARCH
GOVERNING AUTHORITY (USTAR)
ADMINISTRATION
Room 500
324 S STATE ST
SALT LAKE CITY UT 84111, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Michael Driscoll at the above address, by phone at 801-538-8693, by FAX at 801-538-888, or by Internet E-mail at mdriscoll@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/21/2007

AUTHORIZED BY: Michael Driscoll, Program Specialist

R865. Science Technology and Research Governing Authority (USTAR), Administration.
R856-1. Formation and Funding of Utah Science Technology and Research Innovation Teams.
R856-1-6. Ongoing Funding for Utah Science Technology and Research Innovation Team.

(A) Innovation team funding will have non-lapsing status based on the previous years funding, until:

(1) the governing authority cancels the Utah Science Technology and Research innovation team; or

(2) the governing authority approves a motion to reduce innovation team budget; or

[~~(2)~~](3) program changes are mutually proposed by the authorized university representative and the executive director and approved by the governing authority.

KEY: STAR, technology funding, research funding
Date of Enactment or Last Substantive Amendment: 2007
Authorizing, and Implemented or Interpreted Law: 63-38g-302(f)

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Transportation, Program Development
R926-6
Transportation Corridor Preservation Revolving Loan Fund

NOTICE OF PROPOSED RULE
(Amendment)
DAR FILE NO.: 29358
FILED: 12/20/2006, 13:20

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to implement changes recommended by legal counsel.

SUMMARY OF THE RULE OR CHANGE: The amendment makes the Director of the Right-of-Way Division the chairman of the committee and eliminates the listing of potential representatives, who will instead be chosen by the committee based on experience. The rule amendment also makes some wording and nonsubstantive changes.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 72-7-117

ANTICIPATED COST OR SAVINGS TO:
❖ THE STATE BUDGET: No changes are being made that should affect the actual work of the council, so the costs should not change.
❖ LOCAL GOVERNMENTS: There may be some costs to local governments if their representatives are chosen to be on the council, but that decision will be up to the local government and the costs cannot be known at this time.
❖ OTHER PERSONS: There should be no costs to others since the changes do not affect the public.

COMPLIANCE COSTS FOR AFFECTED PERSONS: There should be no costs to others since the changes do not affect the public.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: There should be no costs to business since the changes do not affect the public. John R. Njord, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

TRANSPORTATION
PROGRAM DEVELOPMENT
CALVIN L RAMPTON COMPLEX
4501 S 2700 W
SALT LAKE CITY UT 84119-5998, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

James Beadles at the above address, by phone at 801-965-4168, by FAX at 801-965-4796, or by Internet E-mail at jbeadles@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 02/14/2007.

THIS RULE MAY BECOME EFFECTIVE ON: 02/21/2007

AUTHORIZED BY: John R. Njord, Executive Director

R926. Transportation, Program Development.
R926-6. Transportation Corridor Preservation Revolving Loan Fund.
R926-6-1. Purpose and Authority.

(1) [~~Subsection~~]Utah Code Ann. Section 72-2-117.7(c) and [~~Subsection~~] Utah Code Ann. Section 72-2-117.10(a) authorizes the Utah Transportation Commission to establish this rule. The purpose of this rule is to establish procedures for:

(a) the Utah Department of Transportation to apply for fund monies;

(b) the Utah Transportation Commission to award fund monies; and

(c) repayment conditions; and

(d) establishing a corridor preservation advisory council committee.

R926-6-3. Utah Transportation Preservation Advisory Council[~~Committee~~].

(1) UDOT shall establish a council committee to provide recommendations and priorities concerning the use of fund monies to the commission. assist in prioritizing requests for funding. The council committee shall be chaired by the Director of Right-of-Way[~~UDOT Engineer for Transportation Planning~~]. Additional committee members shall be [~~Chief, UDOT Right of Way Division, ~~]two [~~e~~]Commission members selected by the Chairman of the Commission, one designated member from each of the Metropolitan Planning Organizations in the State, any additional members appointed by the Commission or designated by the Council, and [~~a~~]representatives with relevant technical expertise or experience[~~ from each of the following:~~

~~(a) Bear River Association of Governments;~~
~~(b) Five County Association of Governments;~~
~~(c) Mountainland Association of Governments;~~
~~(d) Six County Association of Governments;~~
~~(e) Southeastern Association of Governments;~~
~~(f) Uintah Basin Association of Governments; and~~
~~(g) Wasatch Front Regional Council~~].

R926-6-5. UDOT Responsibilities.

(1) In addition to the specified statutory considerations, UDOT may also:

(a) review requests and determine if sufficient studies have been completed in a corridor to:

(i) identify environmentally sensitive areas;

(ii) determine feasible alignments;

(iii) determine cost-effectiveness of the project; and

(iv) allow for adequate public involvement.

(b) forward [~~e~~]Council recommendations to the [~~e~~]Commission and request [~~commission~~]approval for funding specific corridors;

(c) acquire real property or any interest in real property necessary for corridor preservation in corridors authorized by the [~~e~~]Commission;

(d) manage monies of the fund; and

(e) administer repayment contracts with counties and municipalities.

R926-6-6. Procedure for the Awarding of Fund Monies.

Requests for monies shall be directed to the [~~e~~]Council for review and prioritization based upon [~~Section~~]R926-6-4. The results of the evaluation of requests shall be forwarded to the Commission. The Commission shall review the recommendations of the Council as well as any other pennant factors and approve, adjust, or reject the recommended expenditures in accordance with Section 72-2-117(4a).

R926-6-7. Repayment Conditions.

The [~~e~~]Commission may determine a loan repayment schedule. All corridor preservation loans shall be paid back according to the approved loan repayment schedule or the earlier of: when the remainder of the right of way has been acquired; or when the project has been advertised for construction. If the commission determines an alignment for a transportation project is not feasible and property for the alignment was purchased under this program, the property shall be disposed of in accordance with Section 72-5-111. All loan repayments together with rents, lease proceeds, profits, and monies resulting from the sale of excess properties shall be returned to the fund.

KEY: transportation, transportation corridor preservation revolving loan fund, transportation planning, right-of-way
Date of Enactment or Last Substantive Amendment: [~~November 20, 2001~~]2007
Notice of Continuation: November 29, 2006
Authorizing, and Implemented or Interpreted Law: 72-2-117.7(c); 72-2-117.10(a)

♦ ♦

End of the Notices of Proposed Rules Section

FIVE-YEAR NOTICES OF REVIEW AND STATEMENTS OF CONTINUATION

Within five years of an administrative rule's original enactment or last five-year review, the responsible agency is required to review the rule. This review is designed to remove obsolete rules from the *Utah Administrative Code*.

Upon reviewing a rule, an agency may: repeal the rule by filing a PROPOSED RULE; continue the rule as it is by filing a NOTICE OF REVIEW AND STATEMENT OF CONTINUATION (NOTICE); or amend the rule by filing a PROPOSED RULE and by filing a NOTICE. By filing a NOTICE, the agency indicates that the rule is still necessary.

NOTICES are not followed by the rule text. The rule text that is being continued may be found in the most recent edition of the *Utah Administrative Code*. The rule text may also be inspected at the agency or the Division of Administrative Rules. NOTICES are effective when filed. NOTICES are governed by *Utah Code* Section 63-46a-9 (1998).

Insurance, Administration
R590-211
Underinsured Motorist Insurer Notification

FIVE YEAR NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

DAR FILE NO.: 29373
FILED: 12/28/2006, 12:00

NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

CONCISE EXPLANATION OF THE PARTICULAR STATUTORY PROVISIONS UNDER WHICH THE RULE IS ENACTED AND HOW THESE PROVISIONS AUTHORIZE OR REQUIRE THE RULE: Subsection 31A-2-201(3) allows the commissioner to write rules to implement the provisions of Title 31A. This rule implements the provisions of Subsection 31A-22-305(12)(a), which was moved to Subsection 31A-22-305.3(5)(a) during the 2006 Legislative Session by S.B. 224. No changes were made to this subsection in the bill. The rule is in the process of being revised now and the code reference will be corrected during this process. Subsection 31A-22-305.3(5)(a) provides the manner in which a claimant, or a claimant's representative, shall give notification to the underinsured motorist insurer once liability policy limits have been tendered. (DAR NOTE: S.B. 224 (2006) is found at Chapter 69, Laws of Utah 2006, and was effective 05/01/2006.)

SUMMARY OF WRITTEN COMMENTS RECEIVED DURING AND SINCE THE LAST FIVE YEAR REVIEW OF THE RULE FROM INTERESTED PERSONS SUPPORTING OR OPPOSING THE RULE: No written comments have been received by the department during the past five years.

REASONED JUSTIFICATION FOR CONTINUATION OF THE RULE, INCLUDING REASONS WHY THE AGENCY DISAGREES WITH COMMENTS IN OPPOSITION TO THE RULE, IF ANY: The rule is necessary to provide the claimant or the claimant's representative with instructions about how to properly notify the insurer that the claim payment has been received by the claimant. It helps the claimant know the method and information needed by the insurer to match up the notification with the complaint file and verify payment was received. Therefore, this rule should be continued.

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

INSURANCE
ADMINISTRATION
Room 3110 STATE OFFICE BLDG
450 N MAIN ST
SALT LAKE CITY UT 84114-1201, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Jilene Whitby at the above address, by phone at 801-538-3803, by FAX at 801-538-3829, or by Internet E-mail at jwhitby@utah.gov

AUTHORIZED BY: Jilene Whitby, Information Specialist

EFFECTIVE: 12/28/2006

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Insurance, Administration
R590-212
Requirements for Interest Bearing Accounts Used by Title Insurance Agencies for Trust Fund Deposits

FIVE YEAR NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

DAR FILE NO.: 29359
FILED: 12/22/2006, 14:00

NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

CONCISE EXPLANATION OF THE PARTICULAR STATUTORY PROVISIONS UNDER WHICH THE RULE IS ENACTED AND HOW THESE PROVISIONS AUTHORIZE OR REQUIRE THE RULE: Section 31A-2-201 gives the commissioner the authority to write rules to implement the provisions of Title 31A. This rule implements the provisions of

Subsection 31A-23a-409(2)(b) dealing with the type of depository account title agencies are to use to deposit trust funds. Section R590-212-5 provides requirements of these types of accounts.

SUMMARY OF WRITTEN COMMENTS RECEIVED DURING AND SINCE THE LAST FIVE YEAR REVIEW OF THE RULE FROM INTERESTED PERSONS SUPPORTING OR OPPOSING THE RULE: The department has received no written comments regarding this rule in the past five years.

REASONED JUSTIFICATION FOR CONTINUATION OF THE RULE, INCLUDING REASONS WHY THE AGENCY DISAGREES WITH COMMENTS IN OPPOSITION TO THE RULE, IF ANY: Without this rule, agencies could go back to the way it was prior to the rule when money was collected from customers and was co-mingled with other agency funds. Co-mingling makes it hard to keep track of the customer's money entrusted to the agency and makes it easy to use the money for uses for which they were not authorized. Therefore, this rule should be continued.

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

INSURANCE
ADMINISTRATION
Room 3110 STATE OFFICE BLDG
450 N MAIN ST
SALT LAKE CITY UT 84114-1201, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Jilene Whitby at the above address, by phone at 801-538-3803, by FAX at 801-538-3829, or by Internet E-mail at jwhitby@utah.gov

AUTHORIZED BY: Jilene Whitby, Information Specialist

EFFECTIVE: 12/22/2006

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Public Safety, Administration
R698-1
Public Petitions for Declaratory Orders

FIVE YEAR NOTICE OF REVIEW AND STATEMENT OF CONTINUATION
DAR FILE NO.: 29384
FILED: 01/02/2007, 16:25

NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

CONCISE EXPLANATION OF THE PARTICULAR STATUTORY PROVISIONS UNDER WHICH THE RULE IS ENACTED AND HOW THESE PROVISIONS AUTHORIZE OR REQUIRE THE RULE: Subsection 63-46b-21(2) of the Utah Administrative Procedures Act requires each agency to issue administrative rules addressing form and procedures regarding requests for declaratory orders from the agency. This rule is in compliance with that statutory mandate.

SUMMARY OF WRITTEN COMMENTS RECEIVED DURING AND SINCE THE LAST FIVE YEAR REVIEW OF THE RULE FROM INTERESTED PERSONS SUPPORTING OR OPPOSING THE RULE: No written comments have been received.

REASONED JUSTIFICATION FOR CONTINUATION OF THE RULE, INCLUDING REASONS WHY THE AGENCY DISAGREES WITH COMMENTS IN OPPOSITION TO THE RULE, IF ANY: Since the agency will issue declaratory orders upon request, this rule is mandated by statute. Therefore, this rule should be continued.

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

PUBLIC SAFETY
ADMINISTRATION
CALVIN L RAMPTON COMPLEX
4501 S 2700 W 1ST FLR
SALT LAKE CITY UT 84119-5994, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Richard D. Wyss at the above address, by phone at 801-965-4794, by FAX at 801-366-0221, or by Internet E-mail at rwyss@utah.gov

AUTHORIZED BY: Scott T Duncan, Commissioner

EFFECTIVE: 01/02/2007

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Public Safety, Administration
R698-2
Government Records Access and Management Act Rule

FIVE YEAR NOTICE OF REVIEW AND STATEMENT OF CONTINUATION
DAR FILE NO.: 29385
FILED: 01/02/2007, 16:25

NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

CONCISE EXPLANATION OF THE PARTICULAR STATUTORY PROVISIONS UNDER WHICH THE RULE IS ENACTED AND HOW THESE PROVISIONS AUTHORIZE OR REQUIRE THE RULE: Section 63-2-204 of the Government Records Access and Management Act (GRAMA) allows a governmental entity to make rules, pursuant to the Utah Administrative Rulemaking Act, specifying where and to whom requests for access to the entity's records shall be directed. This rule is enacted pursuant to that authority and is procedural in nature.

SUMMARY OF WRITTEN COMMENTS RECEIVED DURING AND SINCE THE LAST FIVE YEAR REVIEW OF THE RULE FROM INTERESTED PERSONS SUPPORTING OR OPPOSING THE RULE: No written comments have been received.

REASONED JUSTIFICATION FOR CONTINUATION OF THE RULE, INCLUDING REASONS WHY THE AGENCY DISAGREES WITH COMMENTS IN OPPOSITION TO THE RULE, IF ANY: The rule should be continued in order to provide notice to the public regarding procedures to be followed in order to request access to government records in the possession of the agency. The Department of Public Safety receives hundreds of requests for records each year and this rule serves to standardize the procedures for complying with those requests, saving both the agency and the public time and money.

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

PUBLIC SAFETY
ADMINISTRATION
CALVIN L RAMPTON COMPLEX
4501 S 2700 W 1ST FLR
SALT LAKE CITY UT 84119-5994, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Richard D. Wyss at the above address, by phone at 801-965-4794, by FAX at 801-366-0221, or by Internet E-mail at rwyss@utah.gov

AUTHORIZED BY: Scott T Duncan, Commissioner

EFFECTIVE: 01/02/2007

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Public Safety, Administration
R698-3
Americans With Disabilities Act (ADA) Complaint Procedure

FIVE YEAR NOTICE OF REVIEW AND STATEMENT OF CONTINUATION
DAR FILE NO.: 29386
FILED: 01/02/2007, 16:26

NOTICE OF REVIEW AND STATEMENT OF CONTINUATION

CONCISE EXPLANATION OF THE PARTICULAR STATUTORY PROVISIONS UNDER WHICH THE RULE IS ENACTED AND HOW THESE PROVISIONS AUTHORIZE OR REQUIRE THE RULE: Section 63-46a-3 requires an agency to enact a rule when agency action applies to a class of persons or another agency or authorizes an action. Also, rulemaking is required when an agency provides written interpretation of state of federal legal mandates. These requirements mandate the need for this rule. The rule provides interpretation for procedural requirements under the federal Code of Regulations (CFR) for persons making complaints under the Americans with Disabilities Act.

SUMMARY OF WRITTEN COMMENTS RECEIVED DURING AND SINCE THE LAST FIVE YEAR REVIEW OF THE RULE FROM INTERESTED PERSONS SUPPORTING OR OPPOSING THE RULE: No written comments have been received.

REASONED JUSTIFICATION FOR CONTINUATION OF THE RULE, INCLUDING REASONS WHY THE AGENCY DISAGREES WITH COMMENTS IN OPPOSITION TO THE RULE, IF ANY: It is necessary to continue the rule in order to provide the public and employees of the agency notice regarding procedures for filing complaints under the Americans with Disabilities Act (ADA). In order to properly investigate, maintain records, and issue decisions regarding complaints under the ADA, procedural requirements must be followed for proper administration.

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

PUBLIC SAFETY
ADMINISTRATION
CALVIN L RAMPTON COMPLEX
4501 S 2700 W 1ST FLR
SALT LAKE CITY UT 84119-5994, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:
Richard D. Wyss at the above address, by phone at 801-965-4794, by FAX at 801-366-0221, or by Internet E-mail at rwyss@utah.gov

AUTHORIZED BY: Scott T Duncan, Commissioner

EFFECTIVE: 01/02/2007

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End of the Five-Year Notices of Review and Statements of Continuation Section

NOTICES OF RULE EFFECTIVE DATES

These are the effective dates of PROPOSED RULES or CHANGES IN PROPOSED RULES published in earlier editions of the *Utah State Bulletin*. Statute permits an agency to make a rule effective "on any date specified by the agency that is no fewer than seven calendar days after the close of the public comment period . . . , nor more than 120 days after the publication date." Subsection 63-46a-4(9).

Abbreviations
AMD = Amendment
CPR = Change in Proposed Rule
NEW = New Rule
R&R = Repeal and Reenact
REP = Repeal

Administrative Services
Administrative Rules
No. 29188 (AMD): R15-2. Public Petitioning for Rulemaking.
Published: November 15, 2006
Effective: December 25, 2006

No. 29189 (AMD): R15-4. Administrative Rulemaking Procedures.
Published: November 15, 2006
Effective: December 25, 2006

Commerce
Consumer Protection
No. 29145 (AMD): R152-11. Utah Consumer Sales Practices Act.
Published: November 15, 2006
Effective: December 22, 2006

No. 29143 (AMD): R152-22. Charitable Solicitations Act.
Published: November 15, 2006
Effective: December 22, 2006

No. 29144 (AMD): R152-34-5. Rules Relating to Institutions Exempt Under Section 13-34-105.
Published: November 15, 2006
Effective: December 22, 2006

Occupational and Professional Licensing
No. 29120 (AMD): R156-56. Utah Uniform Building Standard Act Rules.
Published: November 1, 2006
Effective: January 1, 2007

No. 29122 (AMD): R156-56. Utah Uniform Building Standard Act Rules.
Published: November 1, 2006
Effective: January 1, 2007

No. 29075 (AMD): R156-56-711. Statewide Amendments to the IRC.
Published: October 15, 2006
Effective: January 1, 2007

Community and Culture
History
No. 29168 (REP): R212-7. Cultural Resource Management.
Published: November 15, 2006
Effective: December 28, 2006

Education
Administration
No. 29179 (AMD): R277-471. Oversight of School Inspections.
Published: November 15, 2006
Effective: December 23, 2006

Financial Institutions
Banks
No. 29172 (NEW): R333-13. Rule Designating Applicable Federal Law for Banks Subject to the Jurisdiction of the Department of Financial Institutions.
Published: November 15, 2006
Effective: December 22, 2006

Industrial Loan Corporations
No. 29171 (NEW): R339-12. Rule Designating Applicable Federal Law for Industrial Loan Corporations Subject to the Jurisdiction of the Department of Financial Institutions.
Published: November 15, 2006
Effective: December 22, 2006

Health
Health Care Financing, Coverage and Reimbursement Policy
No. 29152 (AMD): R414-10-5. Service Coverage.
Published: November 15, 2006
Effective: December 28, 2006

Insurance
Administration
No. 29167 (AMD): R590-222. Viatical Settlements.
Published: November 15, 2006
Effective: December 22, 2006

Labor Commission
Industrial Accidents
No. 29124 (AMD): R612-4-2. Premium Rates for the Uninsured Employers' Fund and the Employers' Reinsurance Fund.
Published: November 1, 2006
Effective: January 1, 2007

Natural Resources
Parks and Recreation
No. 29163 (AMD): R651-634-1. User Permits and Fees.
Published: November 15, 2006
Effective: January 2, 2007

Wildlife Resources
No. 29160 (AMD): R657-22-18. Hunting Hours and Hunter Requirements.
Published: November 15, 2006
Effective: December 22, 2006

Public Education Job Enhancement Program
Job Enhancement Committee
No. 29138 (NEW): R690-100. Public Education Job Enhancement Program Participant Eligibility and Requirements.
Published: November 15, 2006
Effective: December 23, 2006

Regents (Board Of)
Administration
No. 29141 (REP): R765-610. Utah Higher Education Assistance Authority Federal Family Education Loan Program, PLUS, SLS and Loan Consolidation Programs.
Published: November 15, 2006
Effective: December 27, 2006

Tax Commission
Property Tax
No. 29177 (AMD): R884-24P-68. Property Tax Exemption for Taxable Tangible Personal Property with a Total Aggregate Fair Market Value of $3,500 or Less Pursuant to Utah Code Ann. Section 59-2-1115.
Published: November 15, 2006
Effective: December 26, 2006

End of the Notices of Rule Effective Dates Section

2007 RULES INDEX
BY AGENCY (CODE NUMBER)
AND
BY KEYWORD (SUBJECT)

The *Rules Index* is a cumulative index that reflects all effective changes to Utah's administrative rules. The current *Index* lists changes made effective from January 2, 2007, including notices of effective date received through January 2, 2007, the effective dates of which are no later than January 15, 2007. The *Rules Index* is published in the *Utah State Bulletin* and in the annual *Index of Changes*. Nonsubstantive changes, while not published in the *Bulletin*, do become part of the *Utah Administrative Code (Code)* and are included in this *Index*, as well as 120-Day (Emergency) rules that do not become part of the *Code*. The rules are indexed by Agency (Code Number) and Keyword (Subject).

DAR NOTE: The index may contain inaccurate page number references. Also the index is incomplete in the sense that index entries for Changes in Proposed Rules (CPRs) are not preceded by entries for their parent Proposed Rules. Bulletin issue information and effective date information presented in the index are, to the best of our knowledge, complete and accurate. If you have any questions regarding the index and the information it contains, please contact Nancy Lancaster (801 538-3218), Mike Broschinsky (801 538-3003), or Kenneth A. Hansen (801 538-3777).

A copy of the *Rules Index* is available for public inspection at the Division of Administrative Rules (4120 State Office Building, Salt Lake City, UT), or may be viewed online at the Division's web site (http://www.rules.utah.gov/).

RULES INDEX - BY AGENCY (CODE NUMBER)

ABBREVIATIONS

AMD = Amendment
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EMR = Emergency rule (120 day)
NEW = New rule
EXD = Expired
NSC = Nonsubstantive rule change
REP = Repeal
R&R = Repeal and reenact
5YR = Five-Year Review

CODE REFERENCE	TITLE	FILE NUMBER	ACTION	EFFECTIVE DATE	BULLETIN ISSUE/PAGE
Administrative Services					
Records Committee					
R35-2-2	Declining Requests for Hearings	29081	AMD	01/05/2007	2006-20/2
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Occupational and Professional Licensing					
R156-54	Radiology Technologist and Radiology Practical Technician Licensing Act Rules	29396	5YR	01/09/2007	Not Printed
R156-56	Utah Uniform Building Standard Act Rules	29357	NSC	01/01/2007	Not Printed
R156-56	Utah Uniform Building Standard Act Rules	29122	AMD	01/01/2007	2006-21/33
R156-56	Utah Uniform Building Standard Act Rules	29120	AMD	01/01/2007	2006-21/5
R156-56-711	Statewide Amendments to the IRC	29075	AMD	01/01/2007	2006-20/13
R156-71	Naturopathic Physician Practice Act Rules	29394	5YR	01/08/2007	Not Printed
R156-72	Acupuncture Licensing Act Rules	29395	5YR	01/09/2007	Not Printed
R156-75	Genetic Counselor Licensing Act Rules	29397	5YR	01/09/2007	Not Printed

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Administration					
R270-1-26	Victim Services	29220	AMD	01/09/2007	2006-23/6
Environmental Quality					
Drinking Water					
R309-105-9	Minimum Water Pressure	29036	AMD	01/01/2007	2006-19/68
Financial Institutions					
Nondepository Lenders					
R343-1	Rule Governing Form of Disclosures For Title Lenders, Who Are Under the Jurisdiction of the Department of Financial Institutions	29225	NEW	01/09/2007	2006-23/65
Human Services					
Child and Family Services					
R512-10	Youth Advocate Program	29387	5YR	01/03/2007	Not Printed
R512-43	Adoption Assistance	29388	5YR	01/03/2007	Not Printed
R512-60	Children's Trust Account	29390	5YR	01/03/2007	Not Printed
Labor Commission					
Industrial Accidents					
R612-4-2	Premium Rates for the Uninsured Employers' Fund and the Employers' Reinsurance Fund	29124	AMD	01/01/2007	2006-21/49
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R628-17	Limitations on Commercial Paper and Corporate Notes	29222	NEW	01/09/2007	2006-23/68
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Parks and Recreation					
R651-634-1	User Permits and Fees	29163	AMD	01/02/2007	2006-22/39
Forestry, Fire and State Lands					
R652-122-300	Minimum Standards for Wildland Fire Training	29170	AMD	01/03/2007	2006-22/40
Wildlife Resources					
R657-41-2	Definitions	29201	AMD	01/09/2007	2006-23/69
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Administration					
R698-1	Public Petitions for Declaratory Orders	29384	5YR	01/02/2007	2007-2/118
R698-2	Government Records Access and Management Act Rule	29385	5YR	01/02/2007	2007-2/119
R698-3	Americans With Disabilities Act (ADA) Complaint Procedure	29386	5YR	01/02/2007	2007-2/119
Fire Marshal					
R710-3	Assisted Living Facilities	29235	AMD	01/09/2007	2006-23/70
R710-4	Buildings Under the Jurisdiction of the State Fire Prevention Board	29233	AMD	01/09/2007	2006-23/72
R710-8	Day Care Rules	29234	AMD	01/09/2007	2006-23/76
R710-9	Rules Pursuant to the Utah Fire Prevention Law	29232	AMD	01/09/2007	2006-23/78

CODE REFERENCE	TITLE	FILE NUMBER	ACTION	EFFECTIVE DATE	BULLETIN ISSUE/PAGE
Transportation					
Administration					
R907-66	Administration, Architecture/Engineering Services Procurement, Consultant Services -- Eligibility of Costs for Reimbursement -- Bonuses or Incentive Compensation	29182	AMD	01/03/2007	2006-22/50
Operations, Construction					
R916-1	Advertising and Awarding Construction Contracts	29183	AMD	01/03/2007	2006-22/52
R916-2-3	Prequalification Policy	29184	AMD	01/03/2007	2006-22/53

RULES INDEX - BY KEYWORD (SUBJECT)

ABBREVIATIONS

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KEYWORD AGENCY	FILE NUMBER	CODE REFERENCE	ACTION	EFFECTIVE DATE	BULLETIN ISSUE/PAGE
acupuncture					
Commerce, Occupational and Professional Licensing	29395	R156-72	5YR	01/09/2007	Not Printed
administrative procedures					
Public Safety, Administration	29384	R698-1	5YR	01/02/2007	2007-2/118
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Human Services, Child and Family Services	29388	R512-43	5YR	01/03/2007	Not Printed
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Transportation, Operations, Construction	29183	R916-1	AMD	01/03/2007	2006-22/52
assisted living facilities					
Public Safety, Fire Marshal	29235	R710-3	AMD	01/09/2007	2006-23/70
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Transportation, Operations, Construction	29183	R916-1	AMD	01/03/2007	2006-22/52
	29184	R916-2-3	AMD	01/03/2007	2006-22/53
bonding requirements					
Transportation, Operations, Construction	29183	R916-1	AMD	01/03/2007	2006-22/52
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Transportation, Administration	29182	R907-66	AMD	01/03/2007	2006-22/50
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Commerce, Occupational and Professional Licensing	29120	R156-56	AMD	01/01/2007	2006-21/5

KEYWORD AGENCY	FILE NUMBER	CODE REFERENCE	ACTION	EFFECTIVE DATE	BULLETIN ISSUE/PAGE
	29122	R156-56	AMD	01/01/2007	2006-21/33
	29357	R156-56	NSC	01/01/2007	Not Printed
	29075	R156-56-711	AMD	01/01/2007	2006-20/13
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Commerce, Occupational and Professional Licensing	29120	R156-56	AMD	01/01/2007	2006-21/5
	29357	R156-56	NSC	01/01/2007	Not Printed
	29122	R156-56	AMD	01/01/2007	2006-21/33
	29075	R156-56-711	AMD	01/01/2007	2006-20/13
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	29388	R512-43	5YR	01/03/2007	Not Printed
	29390	R512-60	5YR	01/03/2007	Not Printed
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	29122	R156-56	AMD	01/01/2007	2006-21/33
	29357	R156-56	NSC	01/01/2007	Not Printed
	29075	R156-56-711	AMD	01/01/2007	2006-20/13
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Transportation, Operations, Construction	29183	R916-1	AMD	01/03/2007	2006-22/52
	29184	R916-2-3	AMD	01/03/2007	2006-22/53
cooperative agreement					
Natural Resources, Forestry, Fire and State Lands	29170	R652-122-300	AMD	01/03/2007	2006-22/40
day care					
Public Safety, Fire Marshal	29234	R710-8	AMD	01/09/2007	2006-23/76
developmentally disabled					
Public Safety, Administration	29386	R698-3	5YR	01/02/2007	2007-2/119
disabilities act					
Public Safety, Administration	29386	R698-3	5YR	01/02/2007	2007-2/119
drinking water					
Environmental Quality, Drinking Water	29036	R309-105-9	AMD	01/01/2007	2006-19/68
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The *Rules Index* is a cumulative index that reflects all effective changes to Utah's administrative rules. The current *Index* lists changes made effective from January 2, 2006, including notices of effective date received through December 15, 2006, the effective dates of which are no later than January 1, 2007. The *Rules Index* is published in the *Utah State Bulletin* and in the annual *Index of Changes*. Nonsubstantive changes, while not published in the *Bulletin*, do become part of the *Utah Administrative Code (Code)* and are included in this *Index*, as well as 120-Day (Emergency) rules that do not become part of the *Code*. The rules are indexed by Agency (Code Number) and Keyword (Subject).

DAR NOTE: The index may contain inaccurate page number references. Also the index is incomplete in the sense that index entries for Changes in Proposed Rules (CPRs) are not preceded by entries for their parent Proposed Rules. Bulletin issue information and effective date information presented in the index are, to the best of our knowledge, complete and accurate. If you have any questions regarding the index and the information it contains, please contact Nancy Lancaster (801 538-3218), Mike Broschinsky (801 538-3003), or Kenneth A. Hansen (801 538-3777).

A copy of the *Rules Index* is available for public inspection at the Division of Administrative Rules (4120 State Office Building, Salt Lake City, UT), or may be viewed online at the Division's web site (http://www.rules.utah.gov/).

DAR NOTE: The complete 2006 Rules Index will be printed in the February 1, 2007, issue of the Bulletin.