

**Negotiated Rule Draft No. 3, Docket No. 58-0108-0802**

**Dated June 30, 2008**

**Shaded text indicates revisions made based on the discussion held on June 23, 2008 and revisions made upon further review.**

**002. INCORPORATION BY REFERENCE AND AVAILABILITY OF REFERENCED MATERIALS.**

**01. Incorporation by Reference.** The following documents are incorporated by reference into these rules. (4-11-06)

**a.** 40 CFR Parts 141 and 143. Any reference in these rules to requirements, procedures, or specific forms contained in any section or subsection of 40 CFR Parts 141 and 143 shall constitute the full adoption by reference of that section or subsection, including any notes and appendices therein, unless expressly provided otherwise in these rules. (4-11-06)

**b.** American Water Works Association (AWWA) Standards, effective July 2006, available from the AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235, Telephone (800) 926-7337. (3-30-07)

**02. Availability of Specific Referenced Material.** Copies of specific documents referenced within these rules are available at the following locations: (4-11-06)

**a.** All federal regulations: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Telephone (202)783-3238; U.S. Government Bookstore, Room 194, Federal Bldg., 915 Second Ave., Seattle, WA 98174, (206) 553-4270; or <http://www.gpoaccess.gov/index.html>. (4-11-06)

**b.** All documents incorporated by reference: Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, (208) 373-0502. (4-11-06)

**c.** Recommended Standards for Water Works: a report of the Water Supply Committee of the Great Lakes -- Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, published by Health Education Services, P.O. Box 7126, Albany, New York 12224, 2003, Telephone (518) 439-7286. (4-6-05)

**d.** Manual of Individual and Non-Public Water Supply Systems (EPA 570/9-91-004), published by the U.S. Environmental Protection Agency, available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.20402, Telephone (202) 782-3238. (5-3-03)

**e.** U.S. Department of Commerce, National Bureau of Standards Handbook, No. 69, "Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure" as amended in 1963, NCRP Publications, P.O. Box 20175, Washington, D.C. 20014. (12-10-92)

**f.** Rules of the Idaho Water Resources Board available at [www.adm.idaho.gov/adminrules/rules/idapa37/37/index.htm](http://www.adm.idaho.gov/adminrules/rules/idapa37/37/index.htm), or the Idaho Department of Water Resources, Idaho Water Center, 322 E. Front St., P.O. Box 83720, Boise, Idaho 83720-0098, Telephone (208) 287-4800. (3-30-07)

**g.** ANSI/NSF Standard 44-2002e -- 2004, Residential Cation Exchange Water Softeners, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)

**h.** ANSI/NSF Standard 53-2002e -- 2003, Drinking Water Treatment Units -- Health Effects, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)

**i.** ANSI/NSF Standard 55-2002 -- 2002, Ultraviolet Microbiological Water Treatment Systems, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone

(734) 769-8010.

(4-6-05)

**j.** ANSI/NSF Standard 58-2003 -- 2004, Reverse Osmosis Drinking Water Treatment Systems, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)

**k.** ANSI/NSF Standard 60-2000a -- 2000, Drinking Water Treatment Chemicals -- Health Effects, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)

**l.** ANSI/NSF Standard 61-2000a -- 2000, Drinking Water System Components -- Health Effects, available from the National Sanitation Foundation, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, Telephone (734) 769-8010. (4-6-05)

**m.** American Water Works Association (AWWA) Standards, available from the AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235, (800) 926-7337, [www.awwa.org](http://www.awwa.org). (3-30-07)

**n.** Cross Connection Control Manual, available from Pacific Northwest Section of the American Water Works Association, P.O. Box 19581, Portland, OR, 97280-0581, Telephone (503) 246-5845. (3-30-07)

**o.** Manual of Cross-Connection Control, Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, KAP-200 University Park MC-2531, Los Angeles, CA 90089-2531, (866)545-6340, [www.usc.edu/dept/fccchr/](http://www.usc.edu/dept/fccchr/). (3-30-07)

**p.** Manual on Slow Sand Filtration (1991), published by AWWA Research Foundation 6666 West Quincy Avenue, Denver, CO 80235, (800)926-7337, [www.awwa.org](http://www.awwa.org). (3-30-07)

**q.** Slow Sand Filtration (1991), published by the American Society of Civil Engineers American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191, (800)548-2723, [www.asce.org](http://www.asce.org). (3-30-07)

**r.** Slow Sand Filtration and Diatomaceous Earth Filtration for Small Water Systems, DOH Pub #331-204 (4/03), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, PO Box 47828, Olympia WA 98504-7828, (360)236-3100 or (800)521-0323, [http://www.doh.wa.gov/ehp/dw/Programs/water\\_sys\\_design.htm](http://www.doh.wa.gov/ehp/dw/Programs/water_sys_design.htm). (3-30-07)

**s.** Water System Design Manual, DOH Pub #331-123 (Rev. 8/01), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, PO Box 47828, Olympia WA 98504-7828, (360)236-3100 or (800)521-0323, [http://www.doh.wa.gov/ehp/dw/Programs/water\\_sys\\_design.htm](http://www.doh.wa.gov/ehp/dw/Programs/water_sys_design.htm). (3-30-07)

**t.** Submersible Motors: Application, Installation, Maintenance (Franklin Electric AIM manual), Franklin Electric, Bluffton, Indiana 46714, (800)348-2420, <http://www.franklin-electric.com/Manual/pdf/fullAIM.pdf>. (3-30-07)

**u.** Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources (March 1991 Edition), U.S. Environmental Protection Agency, <http://www.epa.gov/safewater/mbdp/implement.html>. (3-30-07)

**v.** Standard Methods for the Examination of Water and Wastewater, a joint publication of the American Public Health Association, the Water Environment Federation, and the American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235, 800-926-7337, [www.standardmethods.org](http://www.standardmethods.org). (3-30-07)

**w.** F480-02 Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension ratios (SDR), SCH 40 and SCH 80, American Society for Testing and Materials (ASTM Standard F480-02). (3-30-07)

x. "Idaho Standards for Public Works Construction," 2005 Edition, and subsequent revisions, Local Highway Technical Assistance Council, 3330 Grace Street, Boise, ID 83605, (208)344-0565. (4-11-06)

y. Memorandum of Understanding between the Idaho Department of Environmental Quality and the Idaho Division of Building Safety Plumbing Bureau, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706, [www.deq.idaho.gov](http://www.deq.idaho.gov). (3-30-07)

z. Idaho General Safety and Health Standards (IGSHS), available from the Idaho Division of Building Safety, 1090 E. Watertower St., Meridian, Idaho 83642, (208)334-3950, [http://dbs.idaho.gov/safety\\_code/000.html](http://dbs.idaho.gov/safety_code/000.html). (3-30-07)

aa. Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706, [www.deq.idaho.gov](http://www.deq.idaho.gov). (4-2-08)

bb. Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706, [www.deq.idaho.gov](http://www.deq.idaho.gov). (4-2-08)

cc. Implementation Guidance for the Ground Water Rule, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706, [www.deq.idaho.gov](http://www.deq.idaho.gov). ( )

**03. Precedence.** In the event of conflict or inconsistency between the language in these rules and that found in any document incorporated by reference, these rules shall prevail. (4-11-06)

**(BREAK IN CONTINUITY OF SECTIONS)**

**100. MONITORING AND ANALYTICAL REQUIREMENTS.**

**01. Microbiological Contaminant Sampling and Analytical Requirements.** (10-1-93)

a. 40 CFR 141.21, revised as of July 1, 2004<sup>7</sup>, is herein incorporated by reference. (~~3-15-02~~)( )

b. The Department may reduce the total coliform monitoring frequency for community water systems serving twenty-five (25) to one thousand (1000) persons, as specified in 40 CFR 141.21(a)(2) and Subsection 100.01. The Department may allow community water systems serving twenty-five (25) to one thousand (1000) persons to reduce the total coliform monitoring frequency to once per quarter when; (12-10-92)

i. The system submits a written request to the Department in advance of the requirement; and (12-10-92)

ii. There has been no history of total coliform contamination in it's current configuration; and (10-1-93)

iii. The system has been in compliance with the total coliform monitoring requirements for the last three (3) years; and (12-10-92)

iv. A sanitary survey has been conducted within the past five (5) years which indicates to the Department that there are no deficiencies which could affect microbial quality; and (12-10-92)

v. The system uses only a groundwater source that is protected. (12-10-92)

c. The Department may reduce the total coliform monitoring frequency for noncommunity water systems serving less than one thousand (1000) persons as specified in 40 CFR 141.21(a)(3)(i) and Subsection 100.01. The Department may allow noncommunity water systems serving less than one thousand (1000) persons to reduce the total coliform monitoring frequency to once per year when; (12-10-92)

- i. The system submits a written request to the Department in advance of the requirement; and (12-10-92)
- ii. No coliforms have been detected in the last three (3) years of monitoring; and (12-10-92)
- iii. The system has been in compliance with the total coliform monitoring requirements for the last three (3) years; and (12-10-92)
- iv. A sanitary survey has been conducted within the past five (5) years which indicates to the Department that there are no deficiencies which could affect microbial quality; and (12-10-92)
- v. The system uses only a groundwater source that is protected. (12-10-92)

**d.** The Department may reduce the total coliform monitoring frequency for noncommunity water systems serving more than one thousand (1000) persons during any month the system serves one thousand (1000) persons or fewer as specified in 40 CFR 141.21(a)(3)(ii) and Subsection 100.01. The Department will allow noncommunity water systems serving more than one thousand (1000) persons to reduce the total coliform monitoring frequency for any month the system serves one thousand (1000) persons or fewer, down to a minimum of one (1) sample per year, provided; (10-1-93)

- i. The system submits a written request to the Department in advance of the requirement; and (12-10-92)
- ii. No coliforms have been detected in the last three (3) years of monitoring; and (12-10-92)
- iii. The system has been in compliance with the total coliform monitoring requirements for the last three (3) years; and (12-10-92)
- iv. A sanitary survey has been conducted within the past five (5) years which indicates that there are no deficiencies which could effect microbial quality; and (12-10-92)
- v. The system uses only a groundwater source that is protected. (12-10-92)

**e.** A system must collect repeat samples within twenty-four (24) hours of notification of positive results as specified in 40 CFR 141.21(b) and Subsection 100.01. The Department may allow a system to delay collection of repeat samples if the system; (12-10-92)

- i. Identifies the cause of the contamination; (12-10-92)
- ii. Is making progress towards correcting the problem; (12-10-92)
- iii. Submits a written request to delay collecting repeat samples and a written statement admitting an acute MCL violation; (12-10-92)
- iv. Follows public notification requirements specified under 40 CFR Part 141, Subpart Q, revised as of July 1, 2006, for Tier 1 MCL violations including notice for consumers to boil their water; (4-2-08)
- v. Continues to collect the regularly scheduled number of routine samples; (12-10-92)
- vi. Collects all repeat samples immediately following correction of the problem; and (12-10-92)
- vii. Collects five (5) routine samples during the month following the end of the violation as required under 40 CFR 141.21 (b)(5), unless waived as allowed under that paragraph. (12-10-92)

**02. Turbidity Sampling and Analytical Requirements.** 40 CFR 141.22, revised as of July 1, 2001, is herein incorporated by reference. (3-15-02)

**03. Inorganic Chemical Sampling and Analytical Requirements.** 40 CFR 141.23, revised as of July 1, 2004~~7~~, is herein incorporated by reference. (4-6-05)(      )

**04. Organic Chemicals Other Than Total Trihalomethanes, Sampling and Analytical Requirements.** 40 CFR 141.24, revised as of July 1, 2004~~7~~, is herein incorporated by reference. (4-6-05)(      )

**05. Analytical Methods for Radioactivity.** 40 CFR 141.25, revised as of July 1, 2001, is herein incorporated by reference. (3-15-02)

**06. Monitoring Frequency and Compliance Requirements for Radioactivity in Community Water Systems.** 40CFR 141.26, revised as of July 1, 2001, is herein incorporated by reference. (3-15-02)

**07. Waivers and Vulnerability Assessments.** (10-1-93)

**a.** Waivers from sampling requirements in Subsections 100.03, 100.04, 200.01, 551.01.h. and 551.01.i. may be available to all systems for all contaminants except nitrate, nitrite, arsenic and trihalomethanes, and are based upon a vulnerability assessment, use assessment and/or the analytical results of previous sampling. (10-1-93)

**b.** There are two (2) general types of monitoring waivers: (12-10-92)

**i.** Waivers based exclusively upon previous analytical data (12-10-92)

**ii.** Waivers based on a use or vulnerability assessment. (12-10-92)

**c.** Waivers are to be made by the Department on a contaminant specific basis and must be in writing. (12-10-92)

**d.** Vulnerability assessments may be conducted by the Department, the water system, or a third party organization. The Department shall approve or disapprove all vulnerability assessments in writing. (12-10-92)

**e.** Water systems which do not receive waivers shall sample at the required initial and repeat monitoring frequencies. (12-10-92)

**f.** If a system elects to request a waiver from monitoring, it shall do so in writing at least sixty (60) days prior to the required monitoring deadline date. (10-1-93)

**08. Initial Monitoring Schedule.** In addition to the requirements specified in 40 CFR 141.23, revised as of July 1, 2004, 40 CFR 141.24, revised as of July 1, 2004, and 40 CFR 141.40, revised as of July 1, 2001, initial monitoring must be completed according to the following schedule unless otherwise specified by the Department: (4-6-05)

**a.** Public water systems serving more than one hundred (100) people must conduct initial monitoring before January 1, 1995 except that: (10-1-93)

**i.** Initial monitoring for nitrate and nitrite must be completed before January 1, 1994 for all surface water sources serving transient noncommunity public water systems and for all ground water sources serving any public water system. (10-1-93)

**ii.** Initial monitoring for nitrate and nitrite must be completed before April 1, 1993 for all surface water sources serving community or nontransient noncommunity public water systems. (10-1-93)

**iii.** Initial monitoring required under 40 CFR 141.23(c) must be completed before January 1, 1994 for all surface water sources serving community or nontransient noncommunity public water systems. (10-1-93)

**b.** Public water systems serving one hundred (100) or less people must conduct initial monitoring before January 1, 1996 except that: (10-1-93)

i. Initial monitoring for nitrate and nitrite must be completed before January 1, 1994 for all surface water sources serving transient noncommunity public water systems and for all ground water sources serving a public water system. (10-1-93)

ii. Initial monitoring for nitrate and nitrite must be completed before April 1, 1993 for all surface water sources serving community or nontransient noncommunity public water systems. (10-1-93)

iii. Initial monitoring required under 40 CFR 141.23(c) must be completed before January 1, 1994 for all surface water sources serving community or nontransient noncommunity public water systems. (10-1-93)

**09. Alternate Analytical Techniques.** 40 CFR 141.27 is herein incorporated by reference. (10-1-93)

**10. Approved Laboratories.** ~~40 CFR 141.28, revised as of July 1, 2007, is herein incorporated by reference. All analyses conducted pursuant to this chapter these rules, except those listed below, shall be performed in laboratories certified or granted reciprocity by the Department. The following analyses shall be conducted by the public water system in accordance with the procedures approved in Idaho Department of Health and Welfare, Bureau of Laboratories, as provided in Rules, IDAPA 16.02.13, Subsection 008.02, "Rules Governing Certification of Idaho Water Quality Laboratories."~~ The following analyses may be performed by any person acceptable to the Department of Environmental Quality: (10-1-93)(\_\_\_\_)

**a.** pH; (12-10-92)

**b.** Turbidity (Nephelometric method only); (12-10-92)

**c.** Daily analysis for fluoride; (12-10-92)

**d.** Temperature; ~~and~~ (12-10-92)(\_\_\_\_)

**e.** Disinfectant residuals, except ozone, which shall be analyzed using the Indigo Method or an acceptable automated method pursuant to Subsection 300.05.c.; (12-10-92)(\_\_\_\_)

**f.** Alkalinity; (\_\_\_\_)

**g.** Calcium; (\_\_\_\_)

**h.** Conductivity; (\_\_\_\_)

**i.** Silica; and (\_\_\_\_)

**j.** Orthophosphate. (\_\_\_\_)

**11. Consecutive Water System.** 40 CFR 141.29 is herein incorporated by reference. (10-1-93)

**101. -- 149. (RESERVED).**

**150. REPORTING, PUBLIC NOTIFICATION, RECORDKEEPING.**

**01. Reporting Requirements.** 40 CFR 141.31, revised as of July 1, 2001, is herein incorporated by reference. (3-15-02)

**02. Public Notification.** 40 CFR Part 141, Subpart Q, revised as of July 1, 2006, is herein incorporated by reference. (4-2-08)(\_\_\_\_)

**03. Record Maintenance.** 40 CFR 141.33, revised as of July 1, 2006, is herein incorporated by reference. (4-2-08)

**04. Unregulated Contaminant Reporting and Public Notification.** 40 CFR 141.35, revised as of July 1, 2003, is herein incorporated by reference. (3-20-04)

**05. Reporting and Record Keeping for the Interim Enhanced Surface Water Treatment Rule.** 40 CFR 141.175, revised as of July 1, 2002, is herein incorporated by reference. (5-3-03)

**06. Reporting and Record Keeping Requirements for the Disinfectants and Disinfectant Byproducts Rule.** 40 CFR 141.134, revised as of July 1, 2002, is herein incorporated by reference. (5-3-03)

**151. CONSUMER CONFIDENCE REPORTS.**  
40 CFR Part 141, Subpart O, revised as of July 1, 2006~~7~~, is herein incorporated by reference. (4-2-08)

(BREAK IN CONTINUITY OF SECTIONS)

**302. SANITARY SURVEYS FOR SYSTEMS USING SURFACE WATER OR GROUND WATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER.** The Department shall conduct a sanitary survey of all public water systems which use surface water or ground water under the direct influence of surface water. (4-5-00)( )

**01. Frequency.** For noncommunity water systems, a sanitary survey shall be conducted every five (5) years. For community water systems, a sanitary survey shall be conducted every three (3) years, except that a community water system that has been determined to have outstanding performance, according to criteria established by the Department, may have a sanitary survey conducted every five (5) years. (4-5-00)

**02. Report.** A report describing the results of the sanitary survey will be provided to the water system. (4-5-00)

**a.** As part of the sanitary survey report or as an independent action, the Department shall provide written notice to the water system describing any significant deficiency within thirty (30) days after the Department identifies the significant deficiency. The notice may specify corrective actions and deadlines for completion of corrective actions. ( )

**b.** The Department may, at its discretion, provide this written notice at the time of the sanitary survey. ( )

**03. ~~Response Required.~~** A water system must respond in writing not later than forty five (45) days after receipt of the sanitary survey report describing how and on what schedule the system will address significant deficiencies identified in the survey. **Consultation with the Department.** Public water systems shall consult with the Department prior to taking specific corrective actions in response to significant deficiencies identified during a sanitary survey, unless such corrective actions are specified in detail by the Department in its written notification under Subsection 302.02. (4-5-00)( )

**04. Violation.** Failure to address significant deficiencies identified in a sanitary survey that are within the control of the public water system and its governing body shall constitute a violation of these rules. (4-5-00)

**303. SANITARY SURVEYS FOR PUBLIC WATER SYSTEMS USING GROUND WATER.** The Department shall conduct a sanitary survey of all public water systems that use ground water. ( )

**01. Frequency.** For non-community water systems, a sanitary survey shall be conducted every five (5) years. For community water systems, a sanitary survey shall be conducted every three (3) years, except as provided below. ( )

a. A community water system may have a sanitary survey conducted every five (5) years if the system provides at least a 4-log treatment of viruses (using inactivation, removal, or a Department approved combination of 4-log inactivation and removal) before or at the first customer for all of its ground water sources. ( )

b. A community water system may have a sanitary survey conducted every five (5) years if it has an outstanding performance record, as determined by the Department and documented in previous sanitary surveys, and has no history of Total Coliform Rule MCL or monitoring violations under Subsection 100.01.a. since the last sanitary survey. ( )

**02. Report.** A report describing the results of the sanitary survey shall be provided to the water system. ( )

a. As part of the sanitary survey report or as an independent action, the Department shall provide written notice to the water system describing any significant deficiency within thirty (30) days after the Department identifies the significant deficiency. The notice may specify corrective actions and deadlines for completion of corrective actions. ( )

b. The Department may, at its discretion, provide this written notice at the time of the sanitary survey. ( )

**03. Significant Deficiencies.** For each of the eight (8) elements of a sanitary survey of a ground water system, the following deficiencies shall in all cases be considered significant for the purposes of the notice required in Subsection 303.02. Decisions about the significance of other deficiencies identified during the sanitary survey shall be at the Department's discretion, as indicated in the Department's sanitary survey protocol. ( )

a. Source: Lack of a sanitary well cap as specified in Subsection 511.06.b. ( )

b. Treatment: Chemical addition is not flow proportioned or lacks emergency shut-off, as specified in Subsection 531.02.b.ii. ( )

c. Distribution system: No means for flushing dead end water mains, as specified in Subsection 542.09. ( )

d. Finished water storage: Roof leaking, as specified in Subsections 544.09. and 544.09.c. ( )

e. Pumps, pump facilities, and controls: No accessible check valve between pump and shut-off valve, as specified in Subsection 511.04. ( )

f. Monitoring, reporting, and data verification: ~~Overdue~~ Repeated failure to collect the required number and type of Total Coliform Rule samples during the most recent two (2) year period, as specified in Subsection 100.01.a. ( )

g. System management and operation: ~~Lacking operation and maintenance manual, as required in Subsection 501.12.~~ History of frequent depressurization in the distribution system in violation of Subsection 552.01. ( )

h. Operator compliance with state licensing requirements: Responsible charge operator is not licensed as required in Subsection 554.02. ( )

**04. Consultation with the Department.** Public water systems shall consult with the Department prior to taking specific corrective actions in response to significant deficiencies identified during a sanitary survey, unless such corrective actions are specified in detail by the Department in its written notification under Subsection 303.02. ( )

**05. Violation.** Failure to address significant deficiencies identified in a sanitary survey that are

within the control of the public water system and its governing body shall constitute a violation of these rules. ( )

**3034. COMPOSITE CORRECTION PROGRAM (CCP).**

The Department may require a public water system to conduct a composite correction program, as defined in Section 003 of these rules, for the purpose of identifying and correcting deficiencies in water treatment and distribution. Failure to implement the performance improvement factors identified through the CCP constitutes a violation of these rules. (4-5-00)

**3045. -- 309. (RESERVED).**

**(BREAK IN CONTINUITY OF SECTIONS)**

**323. GROUND WATER RULE.** 40 CFR 141, Subpart S, revised as of July 1, 2007, is herein incorporated by reference. “Implementation Guidance for the Ground Water Rule,” as referenced in Section 002, provides assistance to public water system owners and operators in understanding and achieving compliance with the requirements of 40 CFR 141, Subpart S. ( )

**01. Monitoring and Compliance Requirements for Membranes.** Ground water systems that use membrane filtration (or a combination of membrane filtration and disinfection) to achieve a 4-logs inactivation/removal of viruses at a ground water source must comply with the following requirements in addition to those specified in 40 CFR 141, Subpart S. ( )

**a.** All membrane skids or modules must undergo direct integrity testing at least a minimum of once each week that the source is contributing water to the distribution system. More frequent direct integrity testing may be required by the Department or specified by the manufacturer of the membrane system. Membrane systems shall contain sufficient redundancy to allow for offline direct integrity testing of all skids each week at the required interval while continuing retaining the capability to supply peak hour demand flows to the water system. No membrane system shall have fewer than two skids or modules. ( )

**i.** The direct integrity test shall have a resolution capable of detecting a response at the absolute molecular weight cut-off or other parameter that describes the exclusion capability of the membrane, as provided by the manufacturer. ( )

**ii.** The direct integrity test shall have a sensitivity capable of verifying 4-log virus removal (or a lesser Department approved log removal that achieves, in combination with disinfection, a total of 4-log virus treatment). ( )

**b.** Systems using membrane filtration shall submit a monthly operating report which includes the following information. ( )

**i.** Verification of weekly direct integrity testing of each membrane skid or module and action taken in response to a failure of the direct integrity test. ( )

**ii.** Records of any monitoring conducted for the purpose of indirect integrity verification. ( )

**iii.** Any additional information considered necessary by the Department on a case-specific basis to verify proper operation and maintenance of the membrane filtration process. ( )

**02. Discontinuation of Treatment.** Systems that wish to discontinue 4-log virus treatment at a ground water source must meet the following criteria. Ground water sources on which treatment has been discontinued shall be subject to the triggered source water monitoring requirements of 40 CFR 141, Subpart S. ( )

**a.** Demonstration that any known source of contamination has been removed. ( )

- b. Demonstration that structural deficiencies of the well have been rehabilitated and no longer exist. \_\_\_\_\_ (\_\_\_\_)
- c. Provide evidence that the well is drawing from a protected or confined aquifer. \_\_\_\_\_ (\_\_\_\_)
- d. Submit results of one (1) year of monthly monitoring for a fecal indicator organism during which no positive results occurred. \_\_\_\_\_ (\_\_\_\_)

**03. Chlorine Purging Prior to Triggered Source Sampling.** 40 CFR 141.402(e), incorporated by reference into these rules at Section 323, requires that ground water source samples be collected at a location prior to any treatment. Pursuant to this requirement, systems that add chlorine to a source, either in the well bore or near enough to the wellhead that chlorinated water could backflow into the well, shall ensure that all chlorine residual has been purged prior to taking a triggered source water sample. This shall be accomplished by measuring chlorine residual in the source water until a reading of zero is obtained. ~~Zero shall~~ and be recorded in the space provided for chlorine residual on the sample submittal form.

3234. -- 349.

(RESERVED).