CHAPTER 62-550 DRINKING WATER STANDARDS, MONITORING, AND REPORTING

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62-550.102 Intent and Scope.

(1) through (6) No change

Rulemaking Authority 403.861(9) FS. Law Implemented 403.851, 403.853 FS. History–New 11-9-77, Amended 1-13-81, Formerly 17-22.102, Amended 1-18-89, Formerly 17-550.102, Amended 12-9-96, 11-27-01, 4-3-03, 11-28-04.

62-550.200 Definitions for Public Water Systems.

For the purpose of this chapter and Chapters 62-555 and 62-560, F.A.C., the following words, phrases, or terms shall have the following meaning:

(1) through (2) No change

(3) "Advanced treated water" shall be as defined in Rule 62-610.200, F.A.C.

(4) "Advanced Waste Treatment" shall be as defined in section 403.086, F.S.

(5) "Advanced Water Treatment Facility" shall be as defined in Rule 62-610.200, F.A.C.

(3) renumbered (6)

(7) "Appropriate Treatment Technology" shall be as defined in Rule 62-610.200, F.A.C.

(4) through (6) renumbered (8) through (10)

(11) "Barrier" means an action implemented to control microbial and chemical constituents in water treatment. A barrier can be technical/engineered, operational, or managerial in nature. Log reduction credits are assigned only for technical/engineered barriers.

(7) through (17) renumbered (12) through (22)

(23) (18) "Compliance Coompliance Cycle" means the nine-year cycle during which public water systems must monitor. Each compliance cycle consists of three-year compliance periods. The first compliance cycle begins 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.

(19) through (23) renumbered (24) through (28)

(29) "Constituent" shall be as defined in Rule 62-610.200, F.A.C.

(24) through (26) renumbered (30) through (32)

(33) "Critical control point" shall be as defined in Rule 62-610.200, F.A.C.

(27) through (31) renumbered (34) through (38)

(39) "Direct Potable Reuse (DPR)" shall be as defined in Rule 62-610.200, F.A.C.

(32) through (37) renumbered (40) through (45)

(46) "Drinking water" means water that is supplied for potable uses (including drinking, cooking, bathing, and other household uses) that meets standards prescribed by the National Primary Water Regulations (40 CFR 141) of the U.S Environmental Protection Agency and any applicable state regulations.

(38) through (39) renumbered (47) through (48)

(49) "Emerging constituents" or "Emerging contaminants" shall be as defined in Rule 62-610.200 F.A.C.

(40) through (58) renumbered (50) through (68)

(69) "Indicator Compound" shall be as defined in Rule 62-610.200, F.A.C.

(70) "Indirect potable reuse (IPR)" shall be as defined in Rule 62-610.200, F.A.C.

(59) through (67) renumbered (71) through (79)

(80) "Log reduction" means a reduction in the concentration of a constituent or microorganism by a factor of 10. Example: a 1log reduction would correspond to a reduction of 90 percent from the original concentration. A 2-log reduction corresponds to a reduction of 99 percent of the original concentration.

(81) "Log reduction credit" means the number of credits assigned to a specific treatment process (e.g. microfiltration, chlorine disinfection, or ultraviolet disinfection), expressed in log units, for the inactivation or removal of a specific microorganism or group of microorganisms. A reduction of 90 percent would correspond to 1-log credit of reduction, whereas a reduction of 99 percent would correspond to 2-log credits of reduction.

(68) through (84) renumbered (82) through (98)

(99) "Potable reuse" shall be as defined in Rule 62-610.200, F.A.C.

(85) through (86) renumbered (100) through (101)

(102) (87) "Reclaimed Water" shall be as defined in Rule 62-610.200, F.A.C. water that has received at least secondary treatment and is reused after flowing out of a wastewater treatment facility

(88) through (90) renumbered (103) through (105)

(106) "Reuse" shall be as defined in Rule 62-610.200, F.A.C.

(91) through (100) renumbered (107) through (116)

(117) "Source control" shall be as defined in Rule 62-610.200, F.A.C.

(101) through (106) renumbered (118) through (123)

(124) "Surrogate Parameter" shall be as defined in Rule 62-610.200, F.A.C.

(107) through (110) renumbered (125) through (128)

(129) "Treatment reliability" shall be as defined in Rule 62-610.200, F.A.C.

(111) through (121) renumbered (130) through (140)

(141) "Wastewater" shall be as defined in Rule 62-610.200, F.A.C.

(122) through (124) renumbered (142) through (144)

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.853, 403.854, 403.8615, 403.862 FS. History–New 11-9-77, Amended 1-13-

81, 11-19-87, Formerly 17-22.103, Amended 1-18-89, 5-7-90, 1-3-91, 1-1-93, Formerly 17-550.200, Amended 9-7-94, 12-9-96, 9-22-99, 8-1-00, 11-27-01, 4-3-03, 11-25-03, 10-14-04, 11-28-04, 1-17-05, 12-30-11, 7-7-15.

62-550.300 Application of Quality Standards to Public Water Systems.

The ultimate concern of the public water system supervision program is the quality of water for human consumption when the water reaches the consumers. The following rules establish maximum contaminant levels (MCLs) and maximum residual disinfectant levels (MRDLs) for water within public water systems. Additionally, these rules establish treatment technique requirements in lieu of, or in addition to, MCLs for certain contaminants. Public water systems shall comply with the MCLs, MRDLs, and treatment technique requirements established herein unless granted a variance or exemption pursuant to Rule 62-560.510 or 62-560.520, F.A.C., or unless identified as excluded from the MCLs, MRDLs, or treatment technique requirements by this chapter. Public water systems shall take necessary corrective action approved by the Department to meet all applicable MCLs, MRDLs, and treatment technique requirements. Unless otherwise noted, Public Water Systems include Public Water Systems that use Potable Reuse as a source of potable water.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.852(12), (13), 403.853(1) FS. History–New 11-9-77, Amended 3-30-82, 11-19-87, Formerly 17-22.200, Amended 1-18-89, 1-3-91, Formerly 17-550.300, Amended 11-27-01.

62-550.310 Primary Drinking Water Standards: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels.

(These standards may also apply as ground water quality standards as referenced in Chapter 62-520, F.A.C.)

(1) through (6) No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.852(12), 403.853(1) FS. History–New 11-19-87, Formerly 17-22.210, Amended 1-18-89, 5-7-90, 1-3-91, 1-1-93, 1-26-93, 7-4-93, Formerly 17-550.310, Amended 9-7-94, 8-1-00, 11-27-01, 4-14-03, 4-25-03, 11-28-04, 12-30-11, 6-24-14, 7-7-15.

62-550.315 Primary Drinking Water Standards: Treatment Technique Requirements.

(1) through (4) No change.

(5) Source Control for Potable Reuse Sources – This subsection applies only to a drinking water system designating reclaimed water that has undergone advanced waste treatment as a raw water source. Requirements for treatment of advanced waste treated water to be used as a source or supplementation of a potable water system are specified in Rule 62-550.817, F.A.C.62-610.550, F.A.C.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.852(12), 403.853(1), 403.861(17) FS. History-New 11-27-01, Amended 4-3-03.

62-550.320 Secondary Drinking Water Standards: Maximum Contaminant Levels.

This section applies only to community water systems. (These standards may also apply as ground water quality standards as referenced in Chapter 62-520, F.A.C.)

(1) through (2) No change.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.852(13), 403.853(1) FS. History–New 11-19-87, Formerly 17-22.220, Amended 1-18-89, 1-1-93, 7-4-93, Formerly 17-550.320, Amended 9-7-94, 11-27-01.

62-550.325 Secondary Drinking Water Standards: Treatment Technique Requirements for Control of Iron and Manganese.

This section applies only to community water systems (CWSs).

(1) through (2) No change.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.853(1), (3), 403.861(16), (17) FS. History–New 1-1-93, Amended 7-4-93, Formerly 17-550.325, Amended 11-27-01.

62-550.330 Other Contaminants Without a Standard.

No contaminant which creates or has the potential to create an imminent and substantial danger to the public shall be introduced into a public water system.

No change.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.852(12), (13), 403.853(1) FS. History-New 11-19-87, Formerly 17-22.230, 17-550.330.

62-550.340 Small System Compliance Technologies.

(1) through (2) No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.852(12), 403.853(1) FS. History–New 4-14-03, Amended 11-28-04, 12-30-11, 7-7-15.

62-550.400 General Requirements for Unregulated Contaminants.

No change.

Rulemaking Authority 403.861(9), (16), (17) FS. Law Implemented 403.853(1), (3), (7) FS. History–New 1-18-89, Amended 5-7-90, 1-1-93, Formerly 17-550.400, Amended 8-1-00, Repealed 2-16-12.

62-550.500 General Monitoring and Compliance Measurement Requirements for Contaminants and Disinfectant Residuals.

These general requirements shall apply unless other monitoring or compliance measurement requirements are specified in Rules 62-550.511 through 62-550.540, F.A.C., Rule 62-550.821, F.A.C., Rule 62-550.822, F.A.C. or Rule 62-555.830, F.A.C. This introductory text shall be effective on July 7, 2015.

(1) through (4) No change.

(5) Monitoring Locations.

(a) Ground water systems, subpart H and Public Water Systems using Potable Reuse systems shall take a minimum of one sample at every entry point to the distribution system that is representative of each source after treatment (hereafter called a sampling point). The system shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(b) For purposes of Part V of this chapter, subpart H systems also include systems using a combination of surface water (or ground water under the direct influence of surface water), ground water not under the direct influence of surface water and Potable Reuse systems.

(c) If a system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of typical operating conditions (e.g., when water is representative of the sources being used).

(6) through (11) No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.853(1), (3), 403.859(1), 403.861(16), (17) FS. History–New 11-19-87, Formerly 17-22.300, Amended 1-18-89, 5-7-90, 1-1-93, 1-26-93, 7-4-93, Formerly 17-550.500, Amended 9-7-94, 8-1-00, 11-27-01, 4-14-03, 11-28-04, 12-30-11, 7-7-15.

62-550.511 Asbestos Monitoring Requirements.

All community and non-transient non-community systems that are susceptible to asbestos contamination (e.g., source water contaminated by asbestos or use of asbestos-cement pipe within the distribution system) shall monitor to determine compliance with the maximum contaminant level for asbestos specified in paragraph 62-550.310(1)(a), F.A.C., according to the following:

(1) through (7) No change.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 1-1-93, Amended 7-4-93, Formerly 17-550.511, Amended 9-7-94, 2-7-95, 12-9-96, 4-14-03, 11-28-04.

62-550.512 Nitrate and Nitrite Monitoring Requirements.

All public water systems shall monitor to determine compliance with the maximum contaminant levels for nitrate and nitrite specified in paragraph 62-550.310(1)(a), F.A.C.

(1) Community or non-transient non-community water systems that are ground water systems shall monitor annually. Community or non-transient non-community water systems that are subpart H systems shall monitor quarterly. <u>Public Water Systems using Potable</u> <u>Reuse shall monitor quarterly.</u>

(a) The repeat monitoring frequency for ground water systems shall be quarterly for at least one year following any one sample in which the concentration is greater than or equal to 50 percent of the maximum contaminant level. A ground water system may reduce the sampling frequency to annually after the running annual average is less than 50 percent of the maximum contaminant level.

(b) A subpart H and Public Water Systems using Potable Reuse systems may reduce the sampling frequency to annually if each analytical result from the four most recent consecutive quarters is less than 50 percent of the maximum contaminant level. A subpart H systems or Public Water Systems using Potable Reuse systems shall return to quarterly monitoring if any one sample is greater than or equal to 50 percent of the maximum contaminant level.

(c) After the initial round of quarterly sampling is completed, each system that monitors annually shall take subsequent samples during the quarter that previously resulted in the highest analytical result.

(2) through (4) No change.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 1-1-93, Amended 7-4-93, Formerly 17-550.512, Amended 9-7-94, 2-7-95, 8-1-00, 11-27-01, 4-14-03, 1-17-05.

62-550.513 Inorganic Contaminants Monitoring Requirements.

Community and non-transient non-community water systems shall monitor to determine compliance with the maximum contaminant levels of all the contaminants listed in paragraph 62-550.310(1)(a), F.A.C., (except asbestos, nitrate, and nitrite) as follows:

(1) Ground water systems shall take one sample at each sampling point during each compliance period. Subpart <u>H systems and</u> <u>Public Water System using Potable Reuse</u> shall take one sample annually.

(2) through (4) No change.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 1-1-93, Formerly 17-550.513, Amended 2-7-95, 11-27-01, 4-14-03.

62-550.514 Disinfectant Residuals and Disinfection Byproducts Monitoring Requirements.

No change.

Rulemaking Authority 403.8055, 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 1-1-93, Amended 7-4-93, Formerly 17-550.514, Amended 2-7-95, 11-27-01, 11-28-04, 12-30-11.

62-550.515 Volatile Organic Contaminants Monitoring Requirements.

Monitoring for the volatile organic contaminants listed in paragraph 62-550.310(4)(a), F.A.C., shall be conducted to determine compliance with the maximum contaminant levels.

(1) Monitoring Frequency.

(a) Initial base point monitoring. Each community or non-transient non-community water system shall take four consecutive quarterly samples for each contaminant listed in paragraph 62-550.310(4)(a), F.A.C., during the first compliance period.

(b) If the public water system does not detect any of the contaminants listed in paragraph 62-550.310(4)(a), F.A.C., it shall sample annually beginning with the next compliance period.

(c) If the initial monitoring for contaminants listed in paragraph 62-550.310(4)(a), F.A.C., as required in subsection (1) of this section, was completed between January 1, 1988, and December 31, 1992, and the system did not detect any contaminant listed in paragraph 62-550.310(4)(a), F.A.C., then each ground water system, subpart H systems and Public Water Systems using Potable Reuse systems may take one sample annually beginning January 1, 1993.

(d) After a minimum of three years of annual sampling, ground water systems with no previous detection of any contaminant listed in paragraph 62-550.310(4)(a), F.A.C., may take one sample during each compliance period.

(e) Subpart H systems, <u>Public Water Systems using Potable Reuse</u> and ground water systems may apply to the Department for a monitoring waiver as specified in Rule 62-560.545, F.A.C.

(2) through (4) No change.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History-New 1-1-93, Amended 1-26-93, 7-4-93, Formerly 17-550.515, Amended 9-7-94, 2-7-95, 11-27-01, 4-14-03.

62-550.516 Synthetic Organic Contaminants Monitoring Requirements.

Monitoring for the synthetic organic contaminants listed in paragraph 62-550.310(4)(b), F.A.C., shall be conducted as follows: No change.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History-New 1-1-93, Amended 1-26-93, Formerly 17-550.516, Amended 9-7-94, 2-7-95, 11-27-01, 4-14-03, 11-28-04.

62-550.517 Physical Characteristics Monitoring Requirements.

(1) All community, non-transient non-community, and transient non-community public water systems that use any surface water sources, or ground water sources under the direct influence of surface water, or supply any reclaimed water that has undergone advanced waste treatment as part of a Potable Reuse program, shall monitor for turbidity pursuant to Rule 62-550.560, F.A.C.

(2) No change.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 1-1-93, Amended 7-4-93, Formerly 17-550.517, Amended 9-7-94, 8-1-00, 11-27-01, 4-3-03.

62-550.518 Microbiological Monitoring Requirements.

The provisions of subsections 62-550.518(1) through (6), F.A.C., pertaining to distribution system sampling or samples and the provisions of subsection 62-550.518(12), F.A.C., are applicable until March 31, 2016. The provisions of subsections 62-550.518(7) through (11), F.A.C., pertaining to distribution system sampling or samples are applicable until all required repeat monitoring under subsections 62-550.518(7) and (8), F.A.C., and fecal coliform or E. coli testing under subsection 62-550.518(10), F.A.C., that was initiated by a total coliform-positive sample taken before April 1, 2016, is completed, as well as analytical method, reporting, recordkeeping public notification, and consumer confidence report requirements associated with that monitoring and testing. Beginning April 1, 2016, the provisions of 40 CF.R. Part 141, Subpart Y, which is incorporated by reference in Rule 62-550.830, F.A.C., are applicable, with systems required to begin regular monitoring at the same frequency as the system-specific frequency required on March 31, 2016. (40 C.F.R. §141.21(h) revised as of July 1, 2014.) This introductory text shall be effective on July 7, 2015.

(1) All public water systems shall analyze for coliform bacteria to determine compliance with subsection 62-550.310(5), F.A.C. Public water systems shall collect total coliform samples at sites that are representative of water throughout the distribution system and in accordance with a written sampling plan that addresses location, timing, frequency and rotation period. These plans shall be available for review and possible revision on the occasion of a sanitary survey conducted by the Department. Descriptions of sampling locations shall be specific, i.e., numbered street addresses or lot numbers. Pressure tank or plant tap samples are not acceptable for determining compliance.

(2) Total coliform samples shall be taken at regular intervals and in numbers proportionate to the population served by the system. Community water systems, non-transient non-community water systems, transient non-community water systems that are subpart H systems or using Potable Reuse and transient non-community water systems that serve more than 1,000 persons per day during any one month shall take monthly distribution system samples. In addition, systems that are using ground water not under the direct influence of surface water shall take a minimum of one monthly raw water sample that is representative of each ground water source (i.e., well) not under the direct influence of surface water. For purposes of this subsection, consecutive systems that receive any finished water originating from a subpart H system or Potable Reuse system are considered subpart H systems or Potable Reuse system. In no event shall the number of distribution system samples be less than as set forth below:

Minimum number of routine samples								
Population Served		per month						
25	to	2,500	2					
2,501	to	3,300	3					

3,301 to $4,100$ 4 $4,101$ to $4,900$ 5 $4,901$ to $5,800$ 6 $5,801$ to $6,700$ 7 $6,701$ to $7,600$ 8 $7,601$ to $8,501$ 10 $12,900$ 10 $12,900$ 10 $12,901$ to $12,900$ 10 $12,901$ to $21,500$ 20 $17,201$ to $25,000$ 25 $25,001$ to $33,000$ 30 $33,001$ to $33,000$ 40 $41,001$ to $59,000$ 60 $59,001$ to $59,000$ 60 $59,001$ to $80,000$ 90 $96,001$ to $32,000$ 80 $130,001$ to $320,000$ 130 $130,001$ to $320,000$ 180 <				
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5,801 to $6,700$ 7 $6,701$ to $7,600$ 8 $7,601$ to $8,500$ 9 $8,501$ to $12,900$ 10 $12,901$ to $17,200$ 15 $17,201$ to $21,500$ 20 $21,501$ to $25,000$ 25 $25,001$ to $33,000$ 30 $33,001$ to $41,000$ 40 $41,001$ to $50,000$ 50 $50,001$ to $59,000$ 60 $59,001$ to $50,000$ $70,000$ $70,001$ to $83,000$ 80 $83,001$ to $96,000$ 90 $96,001$ to $320,000$ 120 $220,001$ to $420,000$ 180 $450,001$ to $780,000$ 210 $600,001$ to $780,000$ 210	4,101	to	4,900	
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12,901to $17,200$ 15 $17,201$ to $21,500$ 20 $21,501$ to $25,000$ 25 $25,001$ to $33,000$ 30 $33,001$ to $41,000$ 40 $41,001$ to $50,000$ 50 $50,001$ to $59,000$ 60 $50,001$ to $59,000$ 60 $50,001$ to $70,000$ 70 $70,001$ to $83,000$ 80 $83,001$ to $96,000$ 90 $96,001$ to $92,000$ 100 $130,001$ to $220,000$ 120 $220,001$ to $320,000$ 150 $320,001$ to $600,000$ 210 $600,001$ to $780,000$ 240 $780,001$ to $970,000$ 270 $70,001$ to $1,230,000$ 330 $1,230,001$ to $1,230,000$ 330 $1,520,001$ to $1,850,000$ 360 $1,520,001$ to $1,850,000$ 360 $1,520,001$ to $1,850,000$ 360 $1,520,001$ to $1,850,000$ 420 $3,020,001$ to $3,020,000$ 420 $3,020,001$ to $3,960,000$ 450	7,601	to	8,500	9
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70,001to $83,000$ 80 $83,001$ to $96,000$ 90 $96,001$ to $130,000$ 100 $130,001$ to $220,000$ 120 $220,001$ to $320,000$ 150 $220,001$ to $320,000$ 150 $320,001$ to $450,000$ 180 $450,001$ to $600,000$ 210 $600,001$ to $780,000$ 240 $780,001$ to $970,000$ 270 $970,001$ to $1,230,000$ 300 $1,230,001$ to $1,520,000$ 330 $1,520,001$ to $1,850,000$ 360 $1,850,001$ to $2,270,000$ 390 $2,270,001$ to $3,020,000$ 420 $3,020,001$ to $3,960,000$ 450	50,001	to	59,000	60
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	2,270,001	to	3,020,000	420
3,960,001 to more 480	3,020,001	to	3,960,000	450
	3,960,001	to	more	480

(3) through (12) No change.

Rulemaking Authority 403.8055, 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 1-1-93, Amended 7-4-93, Formerly 17-550.518, Amended 9-7-94, 2-7-95, 8-1-00, 11-27-01, 4-3-03, 11-28-04, 7-7-15.

62-550.519 Radionuclides Monitoring Requirements.

This section contains monitoring frequency and compliance requirements for radionuclides for community and nontransient noncommunity water systems.

No change.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 1-1-93, Amended 7-4-93, Formerly 17-550.519, Amended 2-7-95, 11-27-01, 4-14-03, 11-28-04, 6-24-14.

62-550.520 Secondary Contaminants Monitoring Requirements.

(1) Analysis to determine compliance with Rule 62-550.320, F.A.C., shall be conducted by all community water systems and shall

be repeated once each compliance period. Lime softening facilities may operate above 8.5 but less than or equal to 9.0 pH units without Department approval, and may operate above 9.0, but less than or equal to 10.0 pH units upon approval by the Department of a written demonstration by the water system that operating at the higher pH will not cause the treatment plant to suffer operational failures, that minimum disinfectant levels can be maintained throughout the distribution system, and that the system can remain in compliance with the lead and copper and microbiological provisions of Chapters 62-550 and 62-555, F.A.C. Surface water systems, systems supplying reclaimed water that has undergone advanced waste treatment, or ground water systems that are otherwise required to demonstrate the effectiveness of their primary disinfection treatment process to meet *Giardia lamblia* or virus inactivation requirements shall operate within a pH range as specified for their disinfectant in the tables in Appendix E of the Guidance Manual adopted in subsection 62-555.335(1), F.A.C.

(2) through (3) No change.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.853(1), (3), 403.861(16), (17) FS. History-New 11-19-87, Formerly 17-22.320, Amended 1-18-89, 5-7-90, 1-1-93, 7-4-93, Formerly 17-550.520, Amended 11-28-04.

62-550.521 Unregulated Contaminants Monitoring Requirements.

(1) If a sample analysis shows the presence of an unregulated contaminant, the supplier of water shall take a confirmation sample in accordance with subsection 62-550.500(6), F.A.C., and notify the Department within seven days after the result of the confirmation sample is received. If the presence of the contaminant is determined by the State Health Officer and the Department to constitute an unreasonable risk to health, corrective action, including additional monitoring, shall be taken by the supplier of water as approved by the Department, pursuant to Rule 62-560.700, F.A.C., based on the potential health risks of the contaminant level, the estimated time needed to take corrective action, and any other data known to the Department.

(2) Systems supplying reclaimed water that has undergone advanced waste treatment as part of a potable reuse program shall maintain an emerging constituent monitoring protocol pursuant to Rule 62-610.564, F.A.C.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), 403.861(16), (17) FS. History–New 1-1-93, Amended 7-4-93, Formerly 17-550.521, Amended 9-7-94, 2-7-95, 8-1-00.

62-550.540 Monitoring of Consecutive Public Water Systems.

(1) Consecutive systems shall conduct asbestos monitoring in their distribution systems in accordance with Rule 62-550.511, F.A.C.; shall conduct microbiological monitoring in their distribution systems in accordance with Rules 62-550.518 and 62-550.830, F.A.C.; shall comply with the lead and copper control requirements in Rule 62-550.800, F.A.C.; and shall conduct residual disinfectant monitoring at a remote point in their distribution systems in accordance with subsection 62-555.350(6), F.A.C., to verify that the minimum residual disinfectant concentration required by subsection 62-555.350(6), F.A.C., is being maintained throughout their distribution systems. In accordance with subparagraph 62-550.817(1)(b)2., F.A.C., consecutive systems that receive any finished water originating from a subpart H system<u>or a Potable Reuse system</u> shall comply with the distribution system residual disinfectant monitoring requirements in 40 CFR 141.74(c)(3) as adopted in subsection 62-550.817(2), F.A.C. Consecutive systems that add a chemical disinfectant to the water shall conduct residual disinfectant monitoring in accordance with subsection 62-550.514(1) and Rule 62-550.821, F.A.C., and shall conduct disinfection byproduct monitoring in accordance with subsection 62-550.514(2) and Rule 62-550.821, F.A.C. This subsection shall be effective on July 7, 2015.

(2) through (6) No change.

(7) Consecutive systems that receive any finished water originating from a subpart H system<u>and Potable Reuse systems</u> shall comply with the disinfectant residual monitoring requirements of subparagraph 62-550.817(1)(b)2., F.A.C.

(8) Consecutive systems that receive any finished water originating from a system which supplies reclaimed water that has undergone advanced waste treatment as part of a Potable Reuse program shall also be required to follow the monitoring protocol for emerging constituents that have been developed by the original system as per the requirements of Rule 62-550.317, F.A.C.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 11-19-87, Formerly 17-22.340, Amended 1-18-89, 1-1-93, Formerly 17-550.540, Amended 11-27-01, 10-14-04, 11-28-04, 12-30-11, 7-7-15.

62-550.550 Certified Laboratories and Analytical Methods for Public Water Systems.

No change.

Rulemaking Authority 403.8055, 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), 403.861(16), (17) FS. History–New 11-19-87, Formerly 17-22.350, Amended 1-18-89, 5-7-90, 1-3-91, 1-1-93, 1-26-93, Formerly 17-550.550, Amended 9-7-94, 2-7-95, 8-1-00, 11-27-01, 4-14-03, 11-28-04, 9-18-07, 12-30-11, 7-7-15.

62-550.590 Public Water System Monitoring Information and Monitoring Schedule.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), 403.861(16), (17) FS. History–New 1-18-89, Amended 1-3-91, 1-1-93, Formerly 17-550.590, Amended 9-7-94, 8-1-00, 11-27-01, Repealed 2-16-12.

62-550.720 Recordkeeping.

No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.861(16) FS. History–New 11-19-87, Formerly 17-22.820, Amended 1-18-89, 1-1-93, 7-4-93, Formerly 17-550.720, Amended 11-27-01, 11-28-04, 12-30-11.

62-550.730 Reporting Requirements for Public Water Systems.

No change.

Rulemaking Authority 403.8055, 403.853(3), 403.861(9) FS. Law Implemented 403.852(12), (13), 403.853(3), 403.861(16), (17) FS. History–New 11-19-87, Formerly 17-22.830, Amended 1-18-89, 1-3-91, 1-1-93, Formerly 17-550.730, Amended 9-7-94, 2-7-95, 12-9-96, 8-1-00, 11-27-01, 4-3-03, 11-28-04, 1-17-05, 12-30-11.

62-550.800 Control of Lead and Copper.

No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.853 FS. History–New 12-9-96, Amended 8-1-00, 11-27-01, 10-1-10, 12-30-11.

62-550.817 Additional Requirements for Subpart H Surface Water Systems and Public Water Systems using Potable Reuse

The requirements for subpart H systems and Public Water Systems using Potable Reuse in this section apply to all subpart H systems and Public Water Systems using Potable Reuse except where noted in this section and are in addition to the requirements applicable to all public water systems found elsewhere in Chapters 62-550, 62-555, and 62-560, 62-600 and 62-610, F.A.C. Subparagraph 62-550.817(1)(b)2. and paragraphs 62-550.817(11)(e) and 62-550.817(13)(b), F.A.C., apply only to consecutive systems that receive any finished water originating from a subpart H system or Public Water Systems using Potable Reuse. In addition to the requirements of this section, the standards and criteria contained in the regulations adopted in subsections 62-550.817(1), (2), (3), and (4), F.A.C., are adopted by reference and enforceable under these rules. A subpart H system or Public Water Systems using Potable Reuse is considered to be in compliance with the requirements of this section if it meets all the requirements set forth in this section. A subpart H system or Public Water Systems using Potable Reuse is considered to be out of compliance with the requirements of this section if it does not meet all the requirements set forth in this section.

(1) Scope of Requirements.

(a) These rules are intended to implement the National Primary Drinking Water Regulations related to the disinfection and filtration of surface water. <u>Potable Reuse</u> and ground water under the direct influence of surface water, and the recycle of fluids referenced in 40 C.F.R. §141.76(a) (July 1, 2011), which is incorporated by reference in subparagraph 62-550.817(1)(a)2., F.A.C., by subpart H systems that employ conventional filtration or direct filtration treatment.

1. They adopt filtration and disinfection as best available treatment techniques for the removal or inactivation of pathogens in lieu of establishing a maximum contaminant level for the following contaminants: Cryptosporidium, Giardia lamblia, viruses, heterotrophic plate count (HPC) bacteria, Legionella, and turbidity. Subpart H systems and Potable Reuse systems shall provide

treatment of those part(s) of their source water that are surface water, <u>advanced treated water</u> or ground water under the direct influence of surface water. Such treatment shall comply with the treatment technique requirements found in paragraph 62-550.817(2)(b), F.A.C., in lieu of maximum contaminant levels for *Cryptosporidium*, *Giardia lamblia*, viruses, HPC bacteria, *Legionella*, and turbidity.

2. No change.

(b) For purposes of the requirements of this section:

1. through 3. No change.

4. To determine compliance with the following standards for Subpart H systems and ground water under the direct influence of surface water for removal or inactivation, actual log-inactivation due to disinfectants shall be rounded to the same number of significant figures as the standards: 2.0 log *Cryptosporidium*, 3.0 log *Giardia lamblia*, and 4.0 log viruses.

(2) Filtration and Disinfection. In addition to the requirements of this chapter, the standards and criteria contained in the July 1, 2014, edition of 40 C.F.R. §§141.13, 141.22, 141.70(a), 141.70(b)(2), 141.70(c), 141.70(d), 141.70(e), 141.71(b)(6), 141.72, 141.72(a), 141.72(b)(1), 141.72(b)(2), 141.72(b)(3)(i), 141.73, 141.74, and 141.75 (<u>http://www.flrules.org/Gateway/Reference.asp?No=Ref-05603</u>) are adopted by reference and enforceable under this rule. However, 40 C.F.R. §141.72(b)(3)(ii) is not adopted. This subsection shall be effective on July 7, 2015.

(a) No change.

(b) Treatment Techniques for Subpart H systems.

1. through 4. No change.

(c) Treatment Techniques for Public Water Systems using Potable Reuse.

<u>1. The treatment technique requirements consist of installing and properly operating filtration and disinfection water treatment processes that reliably achieve:</u>

a. At least a 10-log removal or inactivation of *Giardia lamblia* in combination of the wastewater treatment facility and the drinking water facility with at least 50% removal or inactivation achieved between a point where the raw water is not subject to recontamination at a point downstream, before or at taps providing water for human consumption at all flow rates; and

b. At least a 10-log removal or inactivation of *Cryptosporidium* oocysts in combination of the wastewater treatment facility and the drinking water facility with at least 50% removal or inactivation achieved between a point where the raw water is not subject to recontamination at a point downstream, before or at taps providing water for human consumption at all flow rates; and

c. At least a 12-log removal or inactivation of viruses in combination of the wastewater treatment facility and the drinking water facility with at least 50% removal or inactivation achieved between a point where the raw water is not subject to recontamination, exposed during treatment to the open atmosphere and a point downstream, before or at taps providing water for human consumption at all flow rates.

d. For the purpose of meeting the requirements of 1.a. through 1.c. above, Log removal credits for every point of barrier from both the domestic wastewater facility, environmental buffer, advanced water treatment facility as well as the drinking water treatment facility may be included in calculation of the total Log removal credits required for each of viruses, *Cryptosporidium*, and *Giardia lamblia*. For the purposes of subsection 62-550.817(2), F.A.C., aerators and other facilities that are protected against contamination from birds, insects, wind borne debris, rainfall, and drainage are not considered to be exposing water to the open atmosphere and possible viral contamination.

2. Log-removal credit through filtration. The Department shall determine if a system is well-operated based on monthly operation report records, sanitary survey and compliance inspection results, CPE results, and any other relevant information.

(a) Alternatively, suppliers of water using advanced secondary reclaimed water may request to calculate log removal credits for every point of barrier from only the environmental buffer, the advanced water treatment facility, and the drinking water treatment facility (excluding the domestic wastewater facility). In such cases, the following log removal/inactivation requirements apply:

1. For Giardia lamblia: At least a 6-log reduction/inactivation of Giardia lamblia in the drinking water facility after a minimum of advanced secondary reuse treatment.

2. For Cryptosporidium: At least a 5.5-log reduction/inactivation of Cryptosporidium oocysts in the drinking water facility after a minimum of advanced secondary reuse treatment.

<u>3. For viruses: At least an 8-log reduction/inactivation of viruses in the drinking water facility after a minimum of advanced secondary reuse treatment.</u>

(b) Alternatively, suppliers of water using potable reuse may conduct site-specific pathogen sampling of raw wastewater, reclaimed water, or treated wastewater for a minimum of 12 samples over a period of at least 12 months or more to characterize the occurrence of Giardia lamblia, Cryptosporidium, and viruses prior to the proposed treatment. Applicant may use site-specific data to

propose alternative log-reduction/inactivation requirements for Giardia lamblia, Cryptosporidium, and viruses that meet the combined acute health risk goal in 62-550.817(2)2.iii, F.A.C. Prior pathogen data collected by systems under the requirements of 62-610.463(4) may be utilized, provided that the Department determines that the applicant has not substantially modified the wastewater treatment process since that data was collected.

The applicant shall submit the pathogen sampling results along with a quantitative microbial risk analysis (QMRA) report, with the following components:

<u>1. A log-normal probability plot of the measured pathogen concentration data for each pathogen in reclaimed water, including non-detect results.</u>

2. A description of the quantitative microbial risk analysis (QMRA) methodology including pathogen concentration distributions, application of Monte Carlo methods, concentration-infectivity functions, and simulation of prospective whole number pathogen log-reductions.

<u>3. A quantitative microbial risk analysis (QMRA) identifying the required pathogen log-reductions for the site-specific pathogen distributions to reduce the combined health risk of acute gastroenteritis for consumers drinking the water to less than 1 in 10,000 annually.</u>

(c) Alternatively, suppliers of water using potable reuse may conduct site-specific pathogen sampling of raw wastewater, reclaimed water, or treated wastewater for a minimum of twelve (12) samples over a period of at least 12 months or more to characterize the occurrence of Giardia lamblia, Cryptosporidium, and viruses prior to the proposed treatment. Applicant may use site-specific data to propose alternative log-reduction/inactivation requirements for Giardia lamblia, Cryptosporidium, and viruses that meet the combined acute health risk goal in 62-550.817(2)2.iii, F.A.C. Prior pathogen data collected by systems under the requirements of 62-610.463(4) may be utilized, provided that the Department determines that the applicant has not substantially modified the wastewater treatment process since that data was collected.

The applicant shall submit the pathogen sampling results along with a quantitative microbial risk analysis (QMRA) report, with the following components:

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2. A description of the quantitative microbial risk analysis (QMRA) methodology including pathogen concentration distributions, application of Monte Carlo methods, concentration-infectivity functions, and simulation of prospective whole number pathogen log-reductions.

<u>3. A quantitative microbial risk analysis (QMRA) identifying the required pathogen log-reductions for the site-specific pathogen distributions to reduce the combined health risk of acute gastroenteritis for consumers drinking the water to less than 1 in 10,000 annually.</u>

(3) Log removal/inactivation credit shall be assigned in accordance with subsection 62-550.817(2), F.A.C.

(4) In addition, the Department may approve alternative values for log reduction/inactivation credits based on engineering analysis, pilot studies, available research and guidance.

(5) Membrane filtration systems, including microfiltration, ultrafiltration, nanofiltration, reverse osmosis, or alternative membrane treatment technologies may be awarded additional pathogen log removal credits by proposing a direct integrity test in line with the USEPA 2005 Membrane Filtration Guidance Manual. The department Systems shall approve such requests from systems which submit the result of challenge studies and technical data, that the Department determines support the proposed direct integrity tests suitability and sensitivity for the proposed pathogen and membrane filtration technology. For example, this may take the form of a daily pressure decay test for Cryptosporidium and Giardia removal by ultrafiltration, or online monitoring of sulfate removal by reverse osmosis as a surrogate for virus removal."

(6) During full-scale operation of the oxidation process designed pursuant to subsection 62-610.318(7), F.A.C., the applicant shall continuously monitor the surrogate and operational parameters established pursuant to subsection 62-610.318(7), F.A.C., as applicable. The applicant shall implement, in full-scale operation, the oxidation process as designed pursuant to subsection 62-610.318(7), F.A.C., 610.318(7), F.A.C.

3. Systems with significant deficiencies related to the treatment process as noted in one or more of the reports listed in subparagraph 62-550.817(2)(b)2., F.A.C., shall not receive the log-removal credits shown in subparagraph 62-550.817(2)(b)2., F.A.C., without Department approval. The Department will notify such systems in writing of any Department-assigned log-removal credits which are lower than the credits shown in subparagraph 62-550.817(2)(b)2., F.A.C., the Department will assign reductions in log-removal credits according to the criteria in the "Compliance Manual for Subpart H systems", June 2004 edition, incorporated herein by reference.

4. Systems shall be deemed to meet the requirements of subparagraph 62-550.817(2)(b)4., F.A.C., by

a. Determining CTcalc,

b. Estimating log-inactivation for the CTcalc for Giardia lamblia and viruses, and

c. Showing that 95% of the daily measurements taken each month meet or exceed the minimum log-inactivation disinfection

requirements. Estimates of log-inactivation levels shall be rounded to two significant figures.

d. A violation of the requirement set forth in III above is a treatment technique violation.

e. If, in any daily measurement, log-inactivation levels are insufficient to meet these requirements the operator shall take immediate steps to increase disinfection levels.

(3) through (4) No change.

(5) Sanitary Surveys and Other Inspections for Subpart H systems and Public Water Systems using Potable Reuse.

(a) Sanitary survey corrective action pursuant to 40 CFR 142.16(b)(1)(ii) and (iii). A subpart H public water system and Public Water Systems using Potable Reuse. must take the necessary steps to address deficiencies identified in sanitary survey reports required under 40 CFR 142.16(b)(3), if such deficiencies are within the control of the system.

(b) Systems shall respond in writing no later than within 45 days after the receipt of a written report of:

1. A sanitary survey outlining significant deficiencies required under paragraph (a) above. Systems shall indicate how and on what schedule the system will address significant deficiencies noted in the survey, and

2. A sanitary survey, CPE evaluation, or an inspection referenced in paragraph (c) below indicating how and on what schedule the system will undertake the filter backwash recycle modifications noted.

(c) A subpart H public water system and a Potable Reuse systems shall take the necessary steps to correct any failure to follow the filter backwash recycling treatment technique requirements of 40 CFR 141.76(c) identified in subparagraph (b)2., above.

(6) through (8) No change.

(9) Demonstrating and evaluating disinfection effectiveness through completion of Form 62-555.900(2).

(a) Subpart H systems <u>and Public Water Systems using Potable Reuse</u> shall demonstrate the effectiveness of their disinfection treatment by:

1. Determining the disinfectant CT value at their plant under operating conditions specified in paragraph 62-550.817(10)(c), F.A.C., and

a. through e. No change.

f. After December 31, 2005, systems may calculate <u>drinking water</u> contact time for virus inactivation only through treatment segments that are not exposed to the open atmosphere during treatment. For the purpose of this paragraph, facilities that are protected from contamination from birds, insects, wind-borne debris, rainfall, and drainage are not considered to be exposing water to the open atmosphere and possible microbial contamination.

2. No change.

(b) Systems that propose to treat surface water <u>or use advanced treated water</u> shall submit CT calculations with the design report required by paragraph 62-555.520(4)(a), F.A.C., when applying for a construction permit.

(c) No change.

(d) The Department shall evaluate the effectiveness of a system's disinfection and thereby determine if the system is in compliance with this section by:

1. Evaluating completed Form 62-555.900(2), Monthly Operation Report for Subpart H Systems and Public Water Systems using Potable Reuse,

2. Evaluating Disinfectant Contact Time Compliance Reports or written baffling factor justification, and

3. Evaluating the results of sanitary surveys and compliance inspections.

(e) No change.

(f) Benchmarking and Profiling. All subpart H systems treating surface water <u>and all Public Water Systems using Potable Reuse</u> shall collect data to establish a disinfection benchmark and profile and shall maintain such data and calculated monthly profile values on Form 62-555.900(2), Monthly Operation Report for Subpart H Systems. The disinfection profile and benchmark shall be based on profile values calculated from data collected over the initial twelve consecutive months after monitoring begins. Pursuant to 40 CFR 141.172(a)(3), the Department shall approve another set of data to establish a profile and benchmark based on a written showing by the system that the replacement data are more representative of expected conditions at the plant.

(10) Approving Alternative Filtration Technologies Pursuant to 40 C.F.R. §§142.16(g)(2)(iv) and 142.16(j)(2)(iv) (July 1, 2011).

(a) Subpart H systems proposing to use other filtration technologies shall perform pilot plant studies to demonstrate the effectiveness of the proposed treatment process to treat water similar to the water source being used.

1. Treatment effectiveness shall be demonstrated through the use of turbidity measurements, particle count studies, <u>surrogates</u>, <u>molecular markers</u>, or sampling results showing virus, *Giardia lamblia*, and *Cryptosporidium* removal efficiencies that demonstrate that the proposed filtration technology, in combination with disinfection treatment, reliably and consistently achieves the log-removal/inactivation requirements of this section.

2. through 3. No Change(b) <u>Subpart H</u> <u>Ssystems</u> determined per subparagraph 62-550.817(2)(b)2., F.A.C., to be welloperated and using membrane filtration treatment technologies including either reverse osmosis, nanofiltration, or ultrafiltration are given a 2.0 log-removal credit for *Cryptosporidium*, a 2.0 log-removal credit for viruses, and a 2.5 log-removal credit for *Giardia lamblia* if grab samples taken every four hours or continuous monitoring show turbidity levels equal to or less than 0.3 NTU 95% of the time and if all samples are equal to or less than 1 NTU.

(c) No change.

(11) Monitoring Requirements. All subpart H systems and Public Water Systems using Potable Reuse shall monitor to determine compliance with both the filtration and disinfection treatment techniques, in lieu of maximum contaminant levels, as specified in 40 CFR 141.74, adopted in subsection 62-550.817(2), F.A.C., and 40 CFR 141.174, adopted in subsection 62-550.817(3), F.A.C. Consecutive subpart H systems that do not provide filtration need monitor only to show compliance with paragraph (e) below.

(a) through (e) No change.

(12) through (15) No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.852(12), 403.853(1), (3) FS. History–New 4-3-03, Amended 5-28-03, 11-25-03, 10-14-04, 1-17-05, 12-30-11, 7-7-15, 8-5-16.

62-550.821 Disinfectant Residuals, Disinfection Byproducts (Stage 1), and Disinfection Byproduct Precursors.

The requirements contained in the July 1, 2014, edition of 40 C.F.R. Part 141, Subpart L (Sections 141.130 through 141.135) (<u>http://www.flrules.org/Gateway/reference.asp?No=Ref-05604</u>), are adopted and incorporated herein by reference and are enforceable under this rule. The following are clarifications and additions to the requirements in 40 C.F.R. Part 141, Subpart L. This introductory text shall be effective on July 7, 2015.

(1) through (17) No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.0877, 403.852(12), 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 11-27-01, Amended 11-28-04, 1-17-05, 12-30-11, 7-7-15.

62-550.822 Initial Distribution System Evaluations and Stage 2 Disinfection Byproducts Requirements. No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.852(12), 403.853(1), (3), (7), 403.861(16), (17) FS. History-New 12-30-11.

62-550.824 Consumer Confidence Reports.

These rules are intended to implement the Primary and Secondary Drinking Water Regulations that require community water systems to prepare and provide to their customers annual consumer confidence reports (CCRs) on the quality of the water delivered by the systems. In addition to the requirements of this rule, the requirements contained in the following regulations are adopted and incorporated herein by reference and are enforceable under this rule: the July 1, 2014, edition of 40 C.F.R. Part 141, Subpart O, Sections 151 through 155, except for 40 C.F.R. §141.153(h)(6)(ii), and Appendix A to 40 C.F.R. Part 141, Subpart O (http://www.flrules.org/Gateway/reference.asp?No=Ref-05590). 40 C.F.R. §141.153(h)(6)(ii) is not adopted or incorporated in this rule. Additional information may be obtained from the USEPA's guidance manuals Preparing Your Drinking Water Consumer 2nd Revision: Confidence Report – Guidance for Water Suppliers, EPA 816-R-09-011, April 2010 (http://www.flrules.org/Gateway/reference.asp?No=Ref-00912), and Revised State Implementation Guidance for the Consumer Confidence Report (CCR) Rule, Appendix E, EPA 816-R-09-010, April 2010 (http://www.flrules.org/Gateway/reference.asp?No=Ref-00913), which are incorporated herein by reference. This introductory text shall be effective on July 7, 2015.

(1) Additional Report Content Requirements. In addition to the requirements of 40 CFR 141.153, the following requirements shall

apply:

(a) Additional Source Water Information. If the Department has determined that a system or well is under the direct influence of surface water, the system shall identify the well and proposed remedial action. If the system supplies advanced treated water as part of a Direct Potable Reuse program, the system shall be required to give a detailed description of the pilot program or study used in the years of operation to demonstrate the ability of the AWTF to provide a water source the same quality or better than other sources used in the area. Requirements for content of the pilot study or program to be recorded and reported are defined in Rule 62-610.564, F.A.C.

(b) Water Treatment Information.

<u>1.</u> Systems shall include a general description of all major water treatment processes. For example, a statement may be worded in the following way: Our water is obtained from ground water sources and is chlorinated for disinfection purposes, and then fluoridated for dental health purposes.

2. Systems which supply advanced treated water as part of a Potable Reuse Program shall include a general description of the major water treatment process performed on that water at the AWTF in addition to that which is performed at the drinking water facility. For example, a statement may be worded in the following way: Our water is obtained from reclaimed sources. In addition to being chlorinated for disinfection purposes, the water undergoes reverse osmosis at an advanced water treatement facility before joining our distribution system.

(c) through (l) No change.

(2) through (3) No change.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.853(3), (4), 403.861(9) FS. History–New 9-22-99, Amended 8-1-00, 11-27-01, 4-10-03, 12-30-11, 7-7-15.

62-550.828 Ground Water Rule.

(1) The requirements contained in the July 1, 2014, edition of 40 C.F.R. Part 141, Subpart S (Sections 141.400 through 141.405) (<u>http://www.flrules.org/Gateway/Reference.asp?No=Ref-05591</u>), are adopted and incorporated herein by reference and are enforceable under this rule, except the following regulations are not adopted or incorporated in this rule: 40 C.F.R. §§141.400(c)(5), 141.402(e)(2), 141.402(f), and 141.403(a)(7)(iii). This subsection shall be effective on July 7, 2015.

(2) In addition to the public notification requirements in Part IV of Chapter 62-560, F.A.C., the following public notification requirements are adopted and incorporated herein by reference and are enforceable under this rule:

(a) In the July 1, 2015, edition of 40 C.F.R. §141.202 (<u>http://www.flrules.org/Gateway/Reference.asp?No=Ref-07215</u>), the Tier 1 public notice requirements pertaining to detection of *E. coli*, enterococci, or coliphage in source water samples required under 40 C.F.R. §§141.402(a) and 141.402(b) (July 1, 2014), which are incorporated by reference in subsection 62-550.828(1), F.A.C.

(b) In the July 1, 2015, edition of 40 C.F.R. §141.203 (<u>http://www.flrules.org/Gateway/Reference.asp?No=Ref-07220</u>), the Tier 2 public notice requirements pertaining to failure to take corrective action or failure to maintain at least 4-log treatment of viruses before or at the first customer under 40 C.F.R. §141.403(a) (July 1, 2014), which is incorporated by reference in subsection 62-550.828(1), F.A.C.

Tables 1 through 6 No change

TABLE 7: MONITORING FREQUENCIES AND LOCATIONS (6/24/2014) See 40 C.F.R. Part 141, Subpart V, which is incorporated by reference in Rule 62-550.822, F.A.C., for Stage 2 disinfection byproducts monitoring frequencies and locations.

Utilities using advanced treated water as a source water to their treatment plant will follow the monitoring frequencies and locations following the requirements for Subpart H systems.

CONTAMINANT OR DISINFECTANT RESIDUAL GROUP	APPLICABILITY		R ROUTINE FORING	TRIGGER THAT INCREASES MONITORING	INCREASED MONITORING		TRIGGER THAT REDUCES MONITORING	REDUCED N	MONITORING	MONITORING LOCATION(S)
		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H SYSTEMS	
ASBESTOS RULE 62-550.511	CWSs, NTNCWSs		E EVERY 9 ARS	SAMPLE > MCL	1 SAMPLE Q	UARTERLY	SYSTEM NOT SUSCEPTIBLE	NO SAMPLI	NG REQUIRED	NOTE 1
NITRATE & NITRITE RULES 62-550.500(5) & 62-550.512	CWSs, NTNCWSs	1 SAMPLE ANNUALL Y	1 SAMPLE QUARTERL Y	GW SYS. WITH SAMPLE ≥ 50% OF MCL	1 SAMPLE QUARTERL Y		SUBPART H SYS. WITH EACH OF 4 MOST RECENT QUARTERLY SAMPLES < 50% OF MCL		I SAMPLE ANNUALLY DURING QUARTER WITH HIGHEST RESULT	EVERY ENTRY POINT TO DIST. SYS. DURING NORMAL OPERATING CONDITIONS
	TWSs	1 SAMPLE	ANNUALLY	NITRATE SAMPLE > MCL OR NITRITE SAMPLE ≥ 50% OF MCL	1 SAMPLE Q	UARTERLY				
INORGANICS RULES 62-550.500(5) & 62-550.513	CWSs, NTNCWSs	1 SAMPLE EVERY 3 YEARS	I SAMPLE ANNUALLY	SAMPLE > MCL	1 SAMPLE Q	UARTERLY	FOUR CONSECUTIV E QUARTERS < MCL		OUTINE TORING	EVERY ENTRY POINT TO DIST. SYS. DURING NORMAL OPERATING CONDITIONS
CHLORINE & CHLORAMINES RULES 62-550.514(1) & 62-550.821	CWSs/NTNCWSs ADDING CHLORINE OR CHLORAMINES		E SAMPLES SEE NOTE 2		-	-				NOTE 2
CHLORINE DIOXIDE RULES 62-550.514(1) & 62-550.821	CWSs/NTNCWSs/T WSs ADDING CHLORINE DIOXIDE	1 SAMPI	LE DAILY	SAMPLE > MCL	ADDITIONAI SET THE FC DA	OLLOWING				NOTE 3
TOTAL TRIHALOMETHANES & HALOACETIC ACIDS (FIVE) - STAGE 1 MCLs RULES 62-550.514(2) & 62-550.521	CWSs/NTNCWSs ADDING A DISINFECTANT & SERVING ≥ 10,000 PERSONS	I SAMPLE PER TREATME NT PLANT QUARTERL Y	4 SAMPLES PER TREATMEN T PLANT QUARTERL Y			_	GW SYS. WITH ANNUAL AVG. TTHM & HAA5 ≤ 50% OF MCL; SUBPART H SYS. WITH ANNUAL AVG. SOURCE-WAT ER TOC ≤ 4.0 MG/L & ANNUAL AVG. TTHM & HAA5 ≤ 50% OF MCL	PER TREATMEN T PLANT	1 SAMPLE PER TREATMENT PLANT QUARTERLY	NOTE 4

CONTAMINANT OR DISINFECTANT RESIDUAL GROUP	APPLICABILITY		R ROUTINE FORING	TRIGGER THAT INCREASES MONITORING	INCRE MONIT		TRIGGER THAT REDUCES MONITORING	REDUCED N	40NITORING	MONITORING LOCATION(S)
		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H SYSTEMS	
	CWSs/NTNCWSs ADDING A DISINFECTANT & SERVING 500 to 9,999 PERSONS CWSs/NTNCWSs ADDING A DISINFECTANT & SERVING < 500 PERSONS	TREATMENT DURING I WARMES	I SAMPLE PER TREAT- MENT PLANT Quarterly PLE PER F ANNUALLY MONTH OF FT WATER MP.	GW SYS. WITH AVG. OF ANNUAL SAMPLES > MCL AVG. OF ANNUAL SAMPLES > MCL	I SAMPLE PER TREAT- MENT PLANT Quarterly I SAMP TREATMEI QUART	NT PLANT	GW SYS. WITH ANNUAL AVG. TTHM & HAA5 ≤ 50% OF MCL FOR 2 CONSECUTIV E YEARS OR ≤ 25% OF MCL FOR 1 YEAR: SUBPART H SYS. WITH ANNUAL AVG. TTHM & HAA5 ≤ 50% OF MCL GW SYS. WITH ANNUAL AVG. TTHM & HAA5 ≤ 50% OF MCL FOR 2 CONSECUTIV	I SAMPLE PER TREAT- MENT PLANT EVERY 3 YEARS DURING MONTH OF WARMEST WATER TEMP.	I SAMPLE PER TREAT MENT PLANT ANNUALLY DURING MONTH OF WARMEST WATER TEMP.	
CHLORITE - STAGE 1	CWSs/NTNCWSs	1 SAMPI	E DAILY	SAMPLE > MCL	ADDITIONA		E YEARS OR ≤ 25% OF MCL FOR 1 YEAR 			NOTE 5
MCL RULES 62-550.514(2) & 62-550.821	ADDING CHLORINE DIOXIDE		PLE SET THLY		SET THE FO	Y	NO INDIVIDUAL ENTRY-POINT OR DIST. SYS. SAMPLE > MCL FOR 1 YEAR	-	PLE SET ITERLY	
3ROMATE - STAGE 1 MCL RULES 62-550.514(2) & 62-550.821	CWSs/NTNCWSs ADDING OZONE	TREATME	PLE PER INT PLANT THLY			-	ANNUAL AVG. SOURCE-WAT ER BROMIDE < 0.05 MG/L BASED UPON MONTHLY MEASUREME NTS	TREATM	PLE PER ENT PLANT TERLY	ENTRANCE TO DIST. SYS. UNDER NORMAL OPERATING CONDITIONS

CONTAMINANT OR DISINFECTANT RESIDUAL GROUP	MONITORING THAT MONITORING			TRIGGER REDUCED MONITORING THAT REDUCES MONITORING			MONITORING LOCATION(S)			
		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H SYSTEMS	
VOLATILE ORGANICS RULES 62-550.500(5) & 62-550.515	CWSs, NTNCWSs	QUARTERI EVERY 3 Y AUTHORIZE	ECUTIVE LY SAMPLES 'EARS OR, IF ED, 1 SAMPLE '; SEE NOTE 6	DETECTION OF ANY VOC AT > 0.0005 MG/L	1 SAMPLE Q	UARTERLY	GW SYS. WITH NO DETECTION OF ANY VOC DURING 3 YEARS OF ANNUAL SAMPLING	I SAMPLE EVERY 3 YEARS		NOTE 7
SYNTHETIC ORGANICS RULES 62-550.500(5) & 62-550.516	CWSs/NTNCWSs SERVING > 3,300 PERSONS	QUARTERI	ECUTIVE .Y SAMPLES 3 YEARS	DETECTION OF ANY SOC	1 SAMPLE QUARTERLY		PLE QUARTERLY NO 2 QUARTERLY SAMPLES NO DETECTION IN THE SAME YEAR OF ANY SOC EVERY 3 YEARS DURING INITIAL COMPLIANCE PERIOD		NOTE 7	
	CWSs/NTNCWSs SERVING ≤ 3,300 PERSONS					C			E EVERY 3 ARS	
MICROBIOLOGICAL CONTAMINANTS RULE 62-550.518	CWSs, NTNCWSs, TWSs SERVING > 1,000 PERSONS		E SAMPLES ; SEE NOTE 8	TOTAL COLIFORM POSITIVE SAMPLE	NOT	E 9				SITES REFLECTING WATER THROUGHOUT DIST. SYS.
	TWSs SERVING ≤ 1,000 PERSONS	2 SAMPLES QUARTERL Y	2 SAMPLES MONTHLY							
SECONDARY CONTAMINANTS RULES 62-550.500(5) & 62-550.520	CWSs		E EVERY 3 ARS			-				EVERY ENTRY POINT TO DIST. SYS. DURING NORMAL OPERATING CONDITIONS
GROSS ALPHA, RADIUM-226, RADIUM-228, & URANIUM RULE 62-550.519(1)	CWSs	4 CONSI QUARTERL ROUTINE M IS 1 SAMPI YE	NITORING IS ECUTIVE .Y SAMPLES 40NITORING LE EVERY 3 ARS TE 10	SAMPLE > MCL OR IF MONITORING ONCE EVERY 6 YEARS, A SAMPLE RESULT > 1/2 MCL	I SAMPLE Q WHEN PR SAMPLE RE OI IF SAMPLIN YEARS A SAMPLE IS ≤ 1/2 MCL,	EVIOUS SULT IS > CL G EVERY 9 ND THE MCL BUT >	AVERAGE OF INITIAL MONITORING SAMPLES OR LAST REDUCED MONITORING SAMPLE < DETECTION LIMIT		E EVERY 9 ARS	EVERY ENTRY POINT TO DIST. SYS. DURING NORMAL OPERATING CONDITIONS

CONTAMINANT OR DISINFECTANT RESIDUAL GROUP	APPLICABILITY	INITIAL OR ROUTINE MONITORING		TRIGGER THAT INCREASES MONITORING	G MONITORING		TRIGGER THAT REDUCES MONITORING	REDUCED MONITORING		MONITORING LOCATION(S)
		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H		GW SYSTEMS	SUBPART H SYSTEMS	
		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	~~~~~		~~~~	SYSTEMS		~~~~	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
	NTNCs	IS 1 SAMP YE	IONITORING LE EVERY 6 ARS TE 10	OR IF MONITORING ONCE EVERY 9 YEARS, A SAMPLE RESULT ≥ DETECTION LIMIT SAMPLE > MCL OR IF MONITORING ONCE EVERY 9 YEARS, A SAMPLE RESULT > ½	EVERY 6 YF SAMPI DETECTION ≤ 1/2 O IF SAMPLIN YEARS A SAMPLE IS BUT ≤ MCI EVERY 3 I SAMPLE Q WHEN PF SAM RESULT O IF SAMPLIN YEARS A SAMPLE IS	ARS; OR IF E IS ≥ LIMIT BUT MCL & G EVERY 6 ND THE > 1/2 MCL , SAMPLE YEARS UARTERLY EVIOUS PLE IS > MCL & G EVERY 9 ND THE	DETECTION LIMIT ≤ AVERAGE OF INITIAL MONITORING SAMPLES OR LAST REDUCED MONITORING SAMPLE ≤ 1/2 MCL AVERAGE OF QUARTERLY MONITORING SAMPLES OR LAST MONITORING SAMPLE < DETECTION LIMIT	YE	E EVERY 6 ARS	
				МСЦ	BUT ≤ MCL EVERY (, SAMPLE	AVERAGE OF INITIAL MONITORING SAMPLES OR LAST REDUCED MONITORING SAMPLE ≤ 1/2 MCL AND > DETECTION LIMIT		MPLE 9 YEARS	
ETA PARTICLE & HOTON ADIOACTIVITY RULE 62-550.519(2)	CWSs DESIGNATED AS VULNERABLE	FOR GROS SAMPLE A FOR TR	QUARTERLY S BETA & 1 NNUALLY ITIUM & TIUM-90	SAMPLE > MCL	I SAMPLE FOR GRO TRITII STRONI	SS BETA, JM, &	ANNUAL AVERAGE OF GROSS BETA MINUS POTASSIUM-4 0 ≤ 50 pCi/L	YEARS FOR TRITIUM, &	E EVERY 3 GROSS BETA, STRONTIUM- 90	EVERY ENTRY POINT TO DIST. SYS. DURING NORMAL OPERATING CONDITIONS

CONTAMINANT OR DISINFECTANT RESIDUAL GROUP	APPLICABILITY	INITIAL OR ROUTINE MONITORING		TRIGGER THAT INCREASES MONITORING	INCREASED TRIGGER MONITORING THAT REDUCES MONITORING		REDUCED N	MONITORING	MONITORING LOCATION(S)		
		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H SYSTEMS		GW SYSTEMS	SUBPART H SYSTEMS		
	CWSs DESIGNATED AS UTILIZING WATERS CONTAMINATED BY EFFLUENTS FROM NUCLEAR FACILITIES	BETA & IO ANNUA TRITIUM & 1	Y FOR GROSS DDINE-131 & LLY FOR STRONTIUM- NOTE 11	QUARTERLY RESULT FOR GROSS BETA OR IODINE-131 > MCL; ANNUAL RESULT FOR TRITIUM OR STRONTIUM-90 > MCL	MONTHLY F BETA, IOI TRITIU STRONT	DINE-131, JM, &	ANNUAL AVERAGE OF GROSS BETA MINUS POTASSIUM- 40 ≤ 15 pCi/L	GROSS BETA TRITIUM, &	YEARS FOR A, IODINE-131, STRONTIUM- 90		
		I		<u> </u>						<u> </u>	
						K)				
				5							
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TABLE 8: INITIAL OR ROUTINE MONITORING SCHEDULE (6/24/2014)REFERENCE SUBSECTION 62-550.500(3), F.A.C.

Under initial or routine monitoring, public water systems shall take required samples during the time period specified below. See 40 C.F.R. Part 141, Subpart V, which is incorporated by reference in Rule 62-550.822, F.A.C., for the Stage 2 disinfection byproducts routine monitoring schedule.

Utilities using advanced treated water as a source water to their treatment plant will follow the monitoring frequencies and locations following the requirements for Subpart H systems.

CONTAMIN DISINFECTANT GROU ASBESTOS RULES 62-550.5 550.511	RESIDUAL P	COMMUNITY WATER SYSTEMS SERVING MORE THAN 3,300 PEOPLE FIRST YEAR OF EACH NINE- YEAR COMPLIANCE CYCLE	COMMUNITY WATER SYSTEMS SERVING 3,300 OR FEWER PEOPLE SECOND YEAR OF EACH NINE-YEAR COMPLIANCE CYCLE	NON-TRANSIENT NON-COMMUNITY WATER SYSTEMS THIRD YEAR OF EACH NINE-YEAR COMPLIANCE CYCLE	TRANSIENT NON-COMMUNITY WATER SYSTEMS
NITRATES AND NITRITES RULES 62- 550.500(3) & 62-550.512	GROUND WATER SYSTEMS			ANNUALLY	
	SUBPART H SYSTEMS		Q	JARTERLY	ANNUALLY
INORGANICS RULES 62- 550.500(3) & 62-550.513	GROUND WATER SYSTEMS	FIRST YEAR OF EACH THREE- YEAR COMPLIANCE PERIOD	SECOND YEAR OF EACH THREE-YEAR COMPLIANCE PERIOD	THIRD YEAR OF EACH THREE-YEAR COMPLIANCE PERIOD	NOT REQUIRED
	SUBPART H SYSTEMS		A	NNUALLY	NOT REQUIRED
CHLORINE & CHLORAMINES RULES 62-550.51 550.821	4(1) & 62-	\mathbf{C}	MONTHLY FOR SYSTEMS AI	DDING CHLORINE OR CHLORAMINES	NOT REQUIRED
CHLORINE DIO2 RULES 62-550.51 550.821		7		DAILY FOR SYSTEMS ADDING CHLORINE DIOXIDE	

CONTAMIN. DISINFECTANT GROU	RESIDUAL	COMMUNITY WATER SYSTEMS SERVING MORE THAN 3,300 PEOPLE	COMMUNITY WATER SYSTEMS SERVING 3,300 OR FEWER PEOPLE	NON-TRANSIENT NON-COMMUNITY WATER SYSTEMS	TRANSIENT NON-COMMUNITY WATER SYSTEMS
TOTAL TRIHALOMET HANES & HALOACETIC ACIDS (FIVE) – STAGE 1 MCL RULES 62- 550.500(3), 550.514(2), & 62-550.821	GROUND WATER SYSTEMS	QUARTERLY FOR SYSTEMS ADDING A DISINFECTANT & SERVING ≥ 10,000 PEOPLE & ANNUALLY DURING MONTH OF WARMEST WATER TEMPERATURE FOR SYSTEMS ADDING A DISINFECTANT & SERVING < 10,000 PEOPLE	ANNUALLY DURING MONTH OF WARMEST WATER TEMPERATURE FOR SYSTEMS ADDING A DISINFECTANT	QUARTERLY FOR SYSTEMS ADDING A DISINFECTANT & SERVING ≥ 10,000 PEOPLE & ANNUALLY DURING MONTH OF WARMEST WATER TEMPERATURE FOR SYSTEMS ADDING A DISINFECTANT & SERVING < 10,000 PEOPLE	NOT REQUIRED
	SUBPART H SYSTEMS	QUARTERLY FOR SYSTEMS ADDING A DISINFECTANT	ANNUALLY DURING MONT	S ADDING A DISINFECTANT & SERVING ≥ 500 PEOPLE & H OF WARMEST WATER TEMPERATURE FOR SYSTEMS DISINFECTANT & SERVING < 500 PEOPLE	NOT REQUIRED
CHLORITE – STA RULES 62-550.51 550.821		DAILY AT EN	TRANCE TO DISTRIBUTION SY SYSTEMS ADDI	NOT REQUIRED	
BROMATE – STA RULES 62-550.51 550.821			MONTHLY FOR S	NOT REQUIRED	
VOLATILE ORG RULES 62-550.50 550.515		QUARTERLY OR, IF AUTHORIZED, ANNUALLY DURING THE FIRST YEAR OF EACH THREE- YEAR COMPLIANCE PERIOD	QUARTERLY OR, IF AUTHORIZED, ANNUALLY DURING THE SECOND YEAR OF EACH THREE- YEAR COMPLIANCE PERIOD	QUARTERLY OR, IF AUTHORIZED, ANNUALLY DURING THE THIRD YEAR OF EACH THREE-YEAR COMPLIANCE PERIOD	NOT REQUIRED
SYNTHETIC ORGANICS RULES 62-550.500(3) & 62- 550.516		QUARTERLY DURING THE FIRST YEAR OF EACH THREE- YEAR COMPLIANCE PERIOD. UNLESS REDUCED MONITORING IS AUTHORIZED	QUARTERLY DURING THE SECOND YEAR OF EACH THREE-YEAR COMPLIANCE PERIOD. UNLESS REDUCED MONITORING IS AUTHORIZED	QUARTERLY DURING THE THIRD YEAR OF EACH THREE-YEAR COMPLIANCE PERIOD UNLESS REDUCED MONITORING IS AUTHORIZED	NOT REQUIRED

CONTAMIN DISINFECTANT GROU	RESIDUAL	COMMUNITY WATER SYSTEMS SERVING MORE THAN 3,300 PEOPLE	COMMUNITY WATER SYSTEMS SERVING 3,300 OR FEWER PEOPLE	NON-TRANSIENT NON-COMMUNITY WATER SYSTEMS	TRANSIENT NON-COMMUNITY WATER SYSTEMS
MICROBIOLO GICAL CONTAMINA NTS RULES 62- 550.500(3) & 62-550.518	GROUND WATER SYSTEMS		Ν	MONTHLY FOR SYSTEMS SERVING > 1,000 PEOPLE & QUARTERLY FOR SYSTEMS SERVING ≤ 1,000 PEOPLE	
	SUBPART H SYSTEMS				
GROSS ALPHA, 226, RADIUM-22 URANIUM RULES 62-550.50 550.519	28 &	ROUTINE MONITORING OCCURS DURING FIRST YEAR OF EACH THREE-YEAR COMPLIANCE PERIOD UNLESS REDUCED MONITORING IS APPROVED	ROUTINE MONITORING OCCURS DURING SECOND YEAR OF EACH THREE- YEAR COMPLIANCE PERIOD UNLESS REDUCED MONITORING IS APPROVED	ROUTINE MONITORING OCCURS DURING THIRD YEAR OF EACH THREE-YEAR COMPLIANCE PERIOD UNLESS REDUCED MONITORING IS APPROVED	NOT REQUIRED
BETA PARTICLE & PHOTON RADIOACTIVITY RULES 62-550.500(3) & 62-550.519		DESIGNATED AS WATERS CONT.	ANNUALLY FOR SYSTEMS VULNERABLE OR UTILIZING AMINATED BY EFFLUENTS JCLEAR FACILITIES	NOT REQUIRED	NOT REQUIRED
SECONDARY CONTAMINANT RULES 62-550.5 550.520		FIRST YEAR OF EACH THREE- YEAR COMPLIANCE PERIOD	SECOND YEAR OF EACH THREE-YEAR COMPLIANCE PERIOD	NOT REQUIRED	NOT REQUIRED

NOTE 1: Systems susceptible to asbestos contamination due solely to corrosion of asbestos-cement pipe shall sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur. Systems susceptible to asbestos contamination due solely to source water shall monitor at every entry point to the distribution system during normal operating conditions. Systems susceptible to asbestos contamination due to both source water and corrosion of asbestos-cement pipe shall sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.

NOTE 2: Systems shall measure the residual disinfectant level at the same locations in the distribution system where, and at the same time when, total coliforms are sampled.

NOTE 3: Systems shall take routine daily samples at the entrance to the distribution system. Systems shall take additional three-sample sets in the distribution system at the following locations:

(a) If 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 points after the entrance to the distribution system (i.e., no booster chlorination), the system shall take three samples as close to the first customer as possible at intervals of at least six hours.

(b) If chlorine is used to maintain a disinfectant residual in the distribution system and there are one or more disinfectant addition points after the entrance to the distribution system (i.e., booster chlorination), the system shall 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.

NOTE 4: Systems taking one sample shall take the sample at a location reflecting maximum residence time in the distribution system. Systems taking more than one sample shall take at least 25% of the samples at locations representing maximum residence time of the

water in the distribution system and shall take the remaining samples at locations representing 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.

NOTE 5: Systems shall take routine daily samples at the entrance to the distribution system. Systems shall take routine monthly or additional three-set samples in the distribution system; each three-set sample shall consist of one sample at each of the following locations: a location as close to the first customer as possible, a location representative of average residence time, and a location reflecting maximum residence time in the distribution system.

NOTE 6: For initial base point monitoring, systems shall take four consecutive quarterly samples during the first three-year compliance period. If a system does not detect any VOC, it shall take one sample annually beginning with the next three-year compliance period.

NOTE 7: During the first quarter of initial base point monitoring, GW systems shall take a minimum of one sample that is representative of each well. Under all other circumstances, systems shall sample at every entry point to the distribution system during normal operating conditions.

NOTE 8: The minimum number of samples shall be as set forth in Rule 62-550.518(2), F.A.C.

NOTE 9: Systems shall conduct repeat monitoring in accordance with Rule 62-550.518(7), F.A.C., and systems that routinely collect fewer than five samples per month shall collect at least five samples during the next month the system provides water to the public.

NOTE 10: The Department shall waive the final two quarters of initial monitoring for a sampling point if the results of the samples from the previous two quarters are below the regulatory detection limit. Additionally, under the conditions described in Rule 62-550.519(1)(c), F.A.C., historical data may be used to satisfy initial monitoring requirements.

NOTE 11: Quarterly monitoring for gross beta shall be based on the analysis of monthly samples or the analysis of a composite of three monthly samples. For iodine-131, a composite of five consecutive daily samples shall be analyzed once each quarter. Annual monitoring for tritium and strontium-90 shall be conducted by means of the analysis of a composite of four consecutive quarterly samples or analysis of four quarterly samples.

Rulemaking Authority 403.8055, 403.861(9) FS. Law Implemented 403.852(12), 403.853(1), (3), (4), (7), 403.861(16), (17) FS. History–New 12-30-11, Amended 7-7-15, 8-5-16.

62-550.830 Revised Total Coliform Rule.

(1) through (2) No change.

Rulemaking Authority 403.8055, 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), (7), 403.861(16), (17) FS. History–New 7-7-15, Amended 8-5-16.

*The U.S. Environmental Protection Agency has identified an error in 40 C.F.R. §141.857(d), where the correct cross reference should be to paragraph (b) instead of paragraph (a), and an error in 40 C.F.R. §141.858(a)(1), where the correct word after §§141.854 should be "through" instead of "though."

