

STAGE 2 DBPR REG LANGUAGE - October 1, 2001 Version

For the reasons set forth in the preamble, title 40 chapter I of the Code of Federal Regulations is proposed to be amended as follows:

PART 9 - [AMENDED]

1. The authority citation for part 9 is proposed to continue to read as follows:

[Insert Authority Citation]

2. In §9.1 the table is proposed to be amended by adding under the indicated heading the new entries in numerical order to read as follows:

§9.1 OMB Approvals under the Paperwork Reduction Act

* * * * *

40 CFR citation		OMB control no.		
*	*	*	*	*
National Primary Drinking Water Regulations				
*	*	*	*	*
141.1000 - 141.1071				
*	*	*	*	*
142.14 - 142.16				
*	*	*	*	*

* * * * *

PART 141 - National Primary Drinking Water Regulations

3. The authority citation for part 141 is proposed to continue to read as follows:

Authority: 42 U.S.C. 300f, 300g-1, 300g-2, 300g-3, 300g-4, 300g-5, 300g-6, 300j-4, 300j-9, and 300j-11.

4. Section 141.2 is proposed to be amended by adding, in alphabetical order, definitions for “combined distribution system”, “consecutive entry point”, “consecutive system”, “locational running annual

average”, “wholesale system”, and “_____” as follows:

§141.2 Definitions.

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“Combined distribution system” is the totality of the distribution systems of all interconnected wholesale systems and consecutive systems.

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“Consecutive entry point” is a location at which finished water is delivered from a wholesale system to a consecutive system that buys some or all of its water, at least 60 days per year.

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“Consecutive system” is a public water system that buys or otherwise receives some or all of its finished water from one or more other public water systems, for at least 60 days per year.

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“Dual samples” are TTHM and HAA5 compliance samples that are taken at the same time and location for the purpose of determining compliance with the TTHM and HAA5 MCLs under subpart XXX.

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“Locational running annual average” (LRAA) is the average of quarterly averages for all samples taken at a particular monitoring location during the previous four calendar quarters.

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“Wholesale system” is a public water system that sells or otherwise delivers finished water to another public water system at least 60 days per year.

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Any other term definitions? Suggestions include finished water, treatment plant, primary disinfection, residual disinfection, entry point to the distribution system.

* * * * *

4a. Section 141.24 is proposed to be amended by amending paragraph (e)(1) to read as follows:

§141.24 Organic chemicals, sampling and analytical requirements.

C * * * *

(e) * * *

(1) *** Other required analytical test procedures germane to conducting these analyses are contained in *Technical Notes on Drinking Water Methods*, EPA/600/R-94-173, October 1994. NTIS PB95-104766. EPA Method 524.3, "Measurement of Purgeable Organic Compounds in Drinking Water by Capillary Column Gas Chromatography/Mass Spectrometry, Revision 1.0", USEPA, 2001, EPA_____ is available through NTIS (PB_____). EPA Method 552.3, "Determination of Haloacetic Acids and Dalapon in Drinking Water by Liquid-liquid Extraction, Derivatization, and Gas Chromatography with Electron Capture Detection, Revision 1.0", USEPA, 2001, EPA _____ is available through NTIS (PB _____). EPA Methods 515.3, 524.2, 552.3, and 549.2 are available from U.S. Environmental Protection Agency, National Exposure Research Laboratory * * *

Contaminant	Method ¹
Benzene.....	502.2, 524.2, 524.3
Carbon tetrachloride	502.2, 524.2, 551.1, 524.3
Chlorobenzene	502.2, 524.2, 524.3
1,2-Dichlorobenzene	502.2, 524.2, 524.3
1,4-Dichlorobenzene	502.2, 524.2, 524.3
1,2-Dichloroethane	502.2, 524.2, 524.3
cis-Dichloroethylene	502.2, 524.2, 524.3
trans-Dichloroethylene	502.2, 524.2, 524.3
Dichloromethane	502.2, 524.2, 524.3
1,2-Dichloropropane	502.2, 524.2, 524.3
Ethylbenzene	502.2, 524.2, 524.3

Styrene	502.2, 524.2, 524.3
Tetrachloroethylene	502.2, 524.2, 551.1, 524.3
1,1,1-Trichloroethane	502.2, 524.2, 551.1, 524.3
Trichloroethylene	502.2, 524.2, 551.1, 524.3
Toluene	502.2, 524.2, 524.3
1,2,4-Trichlorobenzene	502.2, 524.2, 524.3
1,1-Dichloroethylene	502.2, 524.2, 524.3
1,1,2-Trichloroethane	502.2, 524.2, 551.1, 524.3
Vinyl chloride	502.2, 524.2, 524.3
Xylenes (total)	502.2, 524.2, 524.3
2,3,7,8-TCDD (dioxin)	1613
2,4-D ⁴ (as acid, salts and esters).	515.2, 555, 515.1, 515.3, D5317-93
2,4,5-TP ⁴ (Silvex)	515.2, 555, 515.1, 515.3, D5317-93
Alachlor ²	507, 525.2, 508.1, 505, 551.1
Atrazine ²	507, 525.2, 508.1, 505, 551.1
Benzo(a)pyrene	525.2, 550, 550.1
Carbofuran	531.1, 6610
Chlordane	508, 525.2, 508.1, 505
Dalapon	552.1, 515.1, 552.2, 515.3, 552.3
Di(2-ethylhexyl)adipate	506, 525.2
Di(2-ethylhexyl)phthalate	506, 525.2
Dibromochloropropane (DBCP)	504.1, 551.1
Dinoseb ⁴	515.2, 555, 515.1, 515.3
Diquat	549.2
Endothall	548.1
Endrin	508, 525.2, 508.1, 505, 551.1
Ethylene dibromide (EDB)	504.1, 551.1
Glyphosate	547, 6651

Heptachlor	508, 525.2, 508.1, 505, 551.1
Heptachlor Epoxide	508, 525.2, 508.1, 505, 551.1
Hexachlorobenzene	508, 525.2, 508.1, 505, 551.1
Hexachlorocyclopentadiene	508, 525.2, 508.1, 505, 551.1
Lindane	508, 525.2, 508.1, 505, 551.1
Methoxychlor	508, 525.2, 508.1, 505, 551.1
Oxamyl	531.1, 6610
PCBs ³ (as decachlorobiphenyl). (as Arochlors)	508A 508.1, 508, 525.2, 505
Pentachlorophenol	515.2, 525.2, 555, 515.1, 515.3, D5317-93
Picloram ⁴	515.2, 555, 515.1, 515.3, D5317-93
Simazine ²	507, 525.2, 508.1, 505, 551.1
Toxaphene	508, 508.1, 525.2, 505
Total Trihalomethanes	502.2, 524.2, 551.1, 524.3

¹For previously approved EPA methods which remain available for compliance monitoring until June 1, 2001, see paragraph (e)(2) of this section.

²Substitution of the detector specified in Method 505, 507, 508, or 508.1 for the purpose of achieving lower detection limits is allowed as follows. Either an electron capture or nitrogen phosphorous detector may be used provided all regulatory requirements and quality control criteria are met.

³PCBs are qualitatively identified as Arochlors and measured for compliance purposes as decachlorobiphenyl. Users of Method 505 may have more difficulty in achieving the required detection limits than users of Methods 508.1, 525.2 or 508.

⁴Accurate determination of the chlorinated esters requires hydrolysis of the sample as described in EPA Methods 515.1, 515.2, 515.3 and 555, and ASTM Method D 5317-93.

4b. Section 141.33 is proposed to be amended to read as follows:

§141.33 Record maintenance.

* * * * *

(a) Records of microbiological analyses and turbidity analyses made pursuant to this part shall be kept for not less than 5 years. ***

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(f) Copies of monitoring plans developed pursuant to this part shall be kept for the same period of time as the records of analyses are required to be kept under paragraph (a).

4c. Section 141.53 is proposed to be amended to read as follows:

§141.53 Maximum contaminant level goals for disinfection byproducts.

* * * * *

Disinfection byproduct	MCLG (mg/L)
***	***
Trichloroacetic acid	0.08
Chlorite	0.8
Dibromochloromethane	0.06
Monochloroacetic acid	0.1
Chloroform	0.07

5. Section 141.64 is proposed to be amended to read as follows:

§141.64 Maximum contaminant levels for disinfection byproducts.

(a) The maximum contaminant levels (MCLs) for bromate and chlorite are as follows:

Disinfection byproduct	MCL (mg/L)
Bromate	0.010
Chlorite	1.0

(1) *Compliance dates for CWSs and NTNCWSs.* Subpart H systems serving 10,000 or more persons must comply with this paragraph (a) beginning January 1, 2002. Subpart H systems serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water must comply with this paragraph (a) beginning January 1, 2004.

(2) The Administrator, pursuant to section 1412 of the Act, hereby identifies the following as

the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for bromate and chlorite identified in this paragraph (a):

Disinfection byproduct	Best available technology
Bromate Chlorite	Control of ozone treatment process to reduce production of bromate Control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels

(b) *TTHM and HAA5.*

(1) *Subpart L compliance.* (i) *Compliance dates.* Subpart H systems serving 10,000 or more persons must comply with this paragraph (b)(1) beginning January 1, 2002 until the date specified for Stage 2B compliance in §141.1002. Subpart H systems serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water must comply with this paragraph (b)(1) beginning January 1, 2004 until the date specified for Stage 2B compliance in §141.1002.

Disinfection byproduct	MCL (mg/L)
Total trihalomethanes (TTHM)	0.080
Haloacetic acids (five) (HAA5)	0.060

(ii) The Administrator, pursuant to section 1412 of the Act, hereby identifies the following as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for TTHM and HAA5 identified in this paragraph (b)(1):

Disinfection byproduct	Best available technology
Total trihalomethanes (TTHM) and Haloacetic acids (five) (HAA5)	Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant

(2) *Stage 2A compliance.* (i) *Compliance dates.* The Stage 2A transitional MCLs for TTHM and HAA5 must be complied with as a locational running annual average at each monitoring

location beginning [insert date three years after rule promulgation] until the date specified for Stage 2B compliance in §141.1002.

Disinfection byproduct	MCL (mg/L)
Total trihalomethanes (TTHM)	0.120
Haloacetic acids (five) (HAA5)	0.100

(ii) The Administrator, pursuant to section 1412 of the Act, hereby identifies the following as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for TTHM and HAA5 identified in this paragraph (b)(2):

Disinfection byproduct	Best available technology
Total trihalomethanes (TTHM) and Haloacetic acids (five) (HAA5)	Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant

(3) *Stage 2B compliance.* (i) *Compliance dates.* The Stage 2B MCLs for TTHM and HAA5 must be complied with as a locational running annual average at each monitoring location beginning the date specified for Stage 2B compliance in §141.1002.

Disinfection byproduct	MCL (mg/L)
Total trihalomethanes (TTHM)	0.080
Haloacetic acids (five) (HAA5)	0.060

(ii) The Administrator, pursuant to section 1412 of the Act, hereby identifies the following as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for TTHM and HAA5 identified in this paragraph (b)(3) for all systems:

Disinfection byproduct	Best available technology
Total trihalomethanes (TTHM) and Haloacetic acids (five) (HAA5)	Enhanced coagulation or enhanced softening, plus GAC10 or nanofiltration with a molecular weight cutoff #1000 Daltons; or GAC20; with chlorine as the primary and residual disinfectant

(iii) The Administrator, pursuant to section 1412 of the Act, hereby identifies the following as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for TTHM and HAA5 identified in this paragraph (b)(3) for consecutive systems:

Disinfection byproduct	Best available technology
Total trihalomethanes (TTHM) and Haloacetic acids (five) (HAA5)	Improved distribution system and storage tank management to reduce detention time plus the use of chloramines for residual maintenance

(c) A system that is installing GAC or membrane technology to comply with the MCLs in paragraphs (a) or (b)(1) may apply to the State for an extension of up to 24 months past January 1, 2002, but not beyond January 1, 2004. In granting the extension, States must set a schedule for compliance and may specify any interim measures that the system must take. Failure to meet the schedule or any interim treatment requirements constitutes a violation of a National Primary Drinking Water Regulation.

8. Subpart L is proposed to be amended by amending §§141.131(a), (b), (c)(1), and (d); 141.132(b)(3)(ii); and 141.135(a)(3)(ii) to read as follows:

§141.131 Analytical requirements.

(a) *General.* (1) Systems must use only the analytical methods specified in this section, or otherwise approved by EPA for monitoring under this subpart, to demonstrate compliance with the requirements of this subpart and with the requirements of subpart XXX. These methods are effective for compliance monitoring February 16, 1999, unless a different effective date is specified.

(2) The following documents are incorporated by reference. *** EPA Method 300.0 for chlorite and bromide is in *Methods for the Determination of Inorganic Substances in Environmental Samples*, USEPA, August 1993, EPA/600/R-93/100 (available through NTIS, PB94-121811). EPA Methods 300.1 for chlorite, bromate, and bromide and 321.8 for bromate are in *Methods for the Determination of Organic and Inorganic Compounds in Drinking Water, Volume 1*, USEPA, August 2000, EPA 815-R-00-014 (available through NTIS, PB2000-106981). EPA Method 552.3, "Determination of Haloacetic Acids and Dalapon in Drinking Water by Liquid-liquid Extraction, Derivatization, and Gas Chromatography with Electron Capture Detection, Revision 1.0", USEPA, 2001, EPA _____ is available through NTIS (PB _____). EPA Method 524.3, "Measurement of Purgeable Organic Compounds in Drinking Water by Capillary Column Gas Chromatography/Mass Spectrometry, Revision 1.0", USEPA, 2001, EPA_____ is available through NTIS (PB_____). These two EPA methods are also available from: Chemical Exposure Research Branch, *** with *Standard Methods for the Examination of Water and Wastewater, 19th, 20th, and 21st Editions*, American Public Health Association, 1995, 1998, and 2002, respectively. The cited methods published in any of these three editions may be used. Copies may be obtained from the American Public Health Association, *** the *Supplement to the 19th Edition of Standard Methods for the Examination of Water and Wastewater*, and the 20th and 21st Editions of *Standard Methods for the Examination of Water and Wastewater*, American Public Health Association, 1996, 1998, and 2002, respectively. The cited methods published in any of these three editions may be used. Copies may be obtained from the American Public Health Association, *** ASTM D 6581-00 shall be followed in accordance with the *Annual Book of ASTM Standards*, Volume 11.01, American Society for Testing and Materials, 2001 edition; copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

(b) *Disinfection byproducts.* (1) Systems must measure disinfection byproducts by the methods (as modified by the footnotes) listed in the following table:

APPROVED METHODS FOR DISINFECTION BYPRODUCT COMPLIANCE MONITORING			
Contaminant and methodology ¹	EPA Method	Standard Method ²	ASTM Method ³
TTHM			
P&T/GC/EICD & PID	502.2 ⁴		
P&T/GC/MS	524.2, 524.3		
LLE/GC/ECD	551.1		
HAA5			
LLE (diazomethane)/GC/ECD		6251 B ⁵	
SPE (acidic methanol)/GC/ECD	552.1 ⁵		
LLE (acidic methanol)/GC/ECD	552.2, 552.3		
Bromate			
Ion chromatography	300.1		D 6581-00
Ion chromatography & post column reaction	317.1 ⁶ 325.0 ⁶		
IC-ICP/MS	321.8 ^{6,7}		
Chlorite			
Amperometric titration		4500-ClO ₂ E ⁸	
Ion chromatography	300.0, 300.1, 317.1, 325.0		D 6581-00

¹P&T = purge and trap; GC = gas chromatography; EICD = electrolytic conductivity detector; PID = photoionization detector; MS = mass spectrometer; LLE = liquid/liquid extraction; ECD = electron capture detector; SPE = solid phase extraction; IC = ion chromatography; ICP/MS = inductively coupled plasma/mass spectrometer

²19th, 20th, and 21st editions of *Standard Methods for the Examination of Water and Wastewater*, 1995, 1998, and 2002, respectively, American Public Health Association; any of these editions may be used.

³*Annual Book of ASTM Standards*, 2000, Vol 11.01.

⁴If TTHMs are the only analytes being measured in the sample, then a PID is not required.

⁵The samples must be extracted within 14 days of sample collection.

⁶ Ion chromatography & post column reaction or IC-ICP/MS must be used for monitoring of bromate for purposes of demonstrating eligibility of reduced monitoring, as prescribed in §141.132(b)(3)(ii).

⁷Samples must be preserved at the time of sampling with 50 mg ethylenediamine (EDA)/L of sample and must be analyzed within 28 days.

⁸Amperometric titration may be used for routine daily monitoring of chlorite at the entrance to the distribution system, as prescribed in §141.132(b)(2)(i)(A). Ion chromatography must be used for routine monthly monitoring of chlorite and additional monitoring of chlorite in the distribution system, as prescribed in §141.132(b)(2)(i)(B) and (b)(2)(ii).

(2) Analysis under this section for disinfection byproducts must be conducted by laboratories

that have received certification by EPA or the State, except as specified under paragraph (b)(3).

To receive certification to conduct analyses for the DBP contaminants in §§141.64, 141.135, 141.1010, and 141.1012, the laboratory must:

(i) Analyze Performance Evaluation (PE) samples that are acceptable to EPA or the State at least once a year by each method for which the laboratory desires certification.

(ii) Achieve quantitative results on the PE sample analyses that are within the following acceptance limits which become effective [INSERT DATE 60 DAYS AFTER DATE OF RULE PROMULGATION] for purposes of certification.:

DBP	Acceptance Limits (percent)	Comments
TTHM Chloroform Bromodichloromethane Dibromochloromethane Bromoform	 ±20 ±20 ±20 ±20	Laboratory must meet all 4 individual THM acceptance limits in order to successfully pass a PE sample for TTHM
HAA5 Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Monobromoacetic Acid Dibromoacetic Acid	 ±40 ±40 ±40 ±40 ±40	Laboratory must meet the acceptance limits for 4 out of 5 of the HAA5 compounds in order to successfully pass a PE sample for HAA5
Chlorite	±30	
Bromate	±30	

(iii) Report quantitative data for concentrations at least as low as the ones listed in the following table for all DBP samples analyzed for compliance with §§141.64, 141.135, 141.1010, 141.1012, 141.1022, 141.1030, and 141.1032:

DBP	Minimum Reporting Level (Fg/L) ¹	Comments
TTHM Chloroform Bromodichloromethane Dibromochloromethane Bromoform	1.0 1.0 1.0 1.0	
HAA5 Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Monobromoacetic Acid Dibromoacetic Acid	2.0 1.0 1.0 1.0 1.0	
Chlorite	200	
Bromate	5.0	Laboratories that use EPA Methods 317.1, 325.0 or 321.8 must meet a 1.0 Fg/L MRL for bromate.

¹The calibration curve must encompass the MRL concentration and the laboratory must verify the accuracy of the calibration curve at the lowest concentration for which quantitative data are reported by analyzing a calibration check standard at that concentration with each batch of samples. The measured concentration for the check standard must be within ±50% of the expected value. Data may be reported for concentrations lower than the MRL as long as check standards are successfully analyzed at or below the MRL concentrations.

(3) A party approved by EPA or the State must measure daily chlorite samples at the entrance to the distribution system.

(c) ***

(1) ***

footnote 1 *** Free chlorine or total chlorine may be measured for demonstrating compliance with the chlorine MRDL and combined chlorine or total chlorine may be measured for demonstrating compliance with the chloramine MRDL.

* * * * *

(d) ***

(1) ***

(2) *Bromide*. EPA Methods 300.0, 300.1, 317.1, 325.0, or ASTM D 6581-00.

(3) ***

(4) ***

(5) ***

(6) *Magnesium*. All methods allowed in §141.23(k)(1) for measuring magnesium.

§141.132 ***

(b) ***

(3) ***

(i) ***

(ii) *Reduced monitoring*.

(A) Until [insert date three years from rule publication], systems required to analyze for bromate may reduce monitoring from monthly to once per quarter, if the system demonstrates that the average source water bromide concentration is less than 0.05 mg/L based on representative monthly bromide measurements for one year. The system may remain on reduced bromate monitoring until the running annual average source water bromide concentration, computed quarterly, is equal to or greater than 0.05 mg/L based on representative monthly measurements. If the running annual average source water bromide concentration is \geq 0.05 mg/L, the system must resume routine monitoring required by paragraph (b)(3)(i) of this section.

(B) Beginning [insert date three years from rule publication], systems may no longer use the provisions of paragraph (b)(3)(ii)(A) to qualify for reduced monitoring. A system required to analyze for bromate may reduce monitoring from monthly to once per quarter, if the system demonstrates that the average bromate concentration is less than 0.005 mg/L based on monthly bromate measurements under paragraph (b)(3)(i) for one year, analyzed using Method 317.1, 325.0 or 321.8. If a system has qualified for reduced

bromate monitoring under paragraph (b)(3)(ii)(A), that system may remain on reduced monitoring as long as the running annual average of quarterly bromate samples does not exceed 0.005 mg/L based on samples analyzed using Method 317.1, 325.0, or 321.8. The system may remain on reduced bromate monitoring until the running annual average bromate concentration, computed quarterly, is greater than 0.005 mg/L based on representative quarterly measurements. If the running annual average bromate concentration is >0.005 mg/L, the system must resume routine monitoring required by paragraph (b)(3)(i) of this section.

* * * * *

§141.135 ***

(a) ***

(3) ***

(i) ***

(ii) Softening that results in removing at least 10 mg/L of magnesium hardness (as CaCO₃), measured monthly according to §141.131(d)(6) and calculated quarterly as an annual running average.

* * * * *

10. Subpart O is proposed to be amended by amending §141.151(d), §141.153(d)(4)(iv)(B) and (C), and Appendix A to subpart O to read as follows:

§141.151 Purpose and applicability of this subpart.

C * * * * *

(d) For the purpose of this subpart, *detected* means: at or above the levels prescribed by §141.23(a)(4) for inorganic contaminants, at or above the levels prescribed by §141.24(f)(7) for the contaminants listed in §141.61(a), at or above the level prescribed by §141.24(h)(18) for the

contaminants listed in §141.61(c), at or above the levels prescribed by §141.131(b)(2)(iii) for the contaminants listed in §141.64 and §141.153(d)(iv), and at or above the levels prescribed by §141.25(c) for radioactive contaminants.

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§141.153 Content of the reports.

* * * * *

(d) ***

(4) ***

(iv) ***

(B) When compliance with the MCL is determined by calculating a running annual average of all samples taken at a sampling point: the highest average of any of the sampling points and the range of all sampling points expressed in the same units as the MCL. For the MCLs for TTHM and HAA5 in §141.64(b)(2) and (3), systems must include the highest locational running annual average for TTHM and HAA5 and the range of individual sample results for all sampling points expressed in the same units as the MCL. If more than one site exceeds the MCL, the system must include the locational running annual averages for all sites that exceed the MCL.

(C) When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all samples at all sampling points: the average and range of detection expressed in the same units as the MCL. In addition, the system must include the range of individual sample results for all sampling points for the IDSE conducted under subpart XXX.

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APPENDIX A TO SUBPART O—REGULATED CONTAMINANTS

[INSERT NEW CCR LANGUAGE HERE IF NECESSARY.]

11. I REVIEWED IESWTR, LT1 AND SWTR TO SEE IF THERE ARE ANY ISSUES. NONE IDENTIFIED.

12. Subpart Q [PN] is proposed to be amended by revising Appendix A to Subpart Q of Part 141 to read as follows:

APPENDIX A TO SUBPART Q OF PART 141.-NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE¹

Contaminant	MCL/MRDL/TT violations ²		Monitoring & testing procedure violations	
	Tier of public notice required	Citation	Tier of public notice required	Citation
I. Violations of National Primary Drinking Water Regulations (NPDWR): ³				
* * *	*	*	*	*
G. Disinfection Byproducts,***				
1. Total trihalomethanes (TTHM)	2	¹⁰ 141.12, ¹⁸ 141.64(b)	3	¹⁰ 141.30, ¹⁸ 141.132(a)- (b), 141.1030- .1034
2. Haloacetic acids (HAA5)	2	¹⁸ 141.64(b)	3	¹⁸ 141.132(a)- (b), 141.1030- .1034

* * * * *

10. §§141.12 and 141.30 will no longer apply after December 31, 2003.

* * * * *

18. §§141.64(b)(1) and 141.132(a)-(b) apply until §§141.64(b)(3) and 141.1030-.1034 take effect under the schedule in §141.1002. §141.64(b)(2) takes effect on [INSERT DATE THREE YEARS FOLLOWING RULE PUBLICATION] and remains in effect until the effective dates for Stage 2B compliance in §141.1002.

13. Subpart Q is proposed to be amended by revising Appendix B to Subpart Q of Part 141 to read as follows:

[DO WE WANT PN LANGUAGE FOR PEAK EXCURSIONS?]

APPENDIX B TO SUBPART Q OF PART 141.-STANDARD HEALTH EFFECTS LANGUAGE FOR PUBLIC NOTIFICATION

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard health effects language for public notification
* * *	*	*	* * *
H. Disinfection Byproducts (DBPs), *** ¹⁶ :			
79. Total trihalomethanes (TTHM).	N/A	0.10/0.080 ¹⁷	***
80. Haloacetic acids (HAA5).	N/A	0.060 ¹⁹	***

* * * * *

[INSERT NEW LANGAGE FOR ENDNOTES 16 AND 17, AS NEEDED.]

* * * * *

12. Part 141 is proposed to be amended by adding a new subpart XXX to read as follows:

Subpart XXX- Stage 2 Disinfection Byproducts

Sec.

General Requirements

- 141.1000 What are the general requirements of subpart XXX?
- 141.1001 Who is subject to the requirements of subpart XXX?
- 141.1002 When must my system comply with these requirements?
- 141.1003 What does subpart XXX require?
- 141.1004 Are there any other provisions that I need to know?

Initial Distribution System Evaluations

- 141.1010 What is an Initial Distribution System Evaluation or IDSE?
- 141.1011 Is my system required to conduct an IDSE?

- 141.1012 What are the alternatives to the IDSE monitoring?
- 141.1013 What schedule is my system required to meet for the IDSE?
- 141.1014 What monitoring is my system required to conduct under the IDSE?
- 141.1015 What do I need to include in my IDSE report?
- 141.1016 How do I select Stage 2B monitoring locations to recommend to the State?
- 141.1017 How do I determine peak historical months for DBP levels or water temperature?
- 141.1018 How do I conduct HAA5 Simulated Distribution System (SDS) DBP test if I have TTHM compliance monitoring data but no HAA5 data?

Stage 2A Transitional MCL Requirements

- 141.1020 Is my system subject to the Stage 2A transitional MCL requirements?
- 141.1021 What monitoring is my system required to conduct under Stage 2A transitional MCL requirements?
- 141.1022 How do I calculate compliance with Stage 2A transitional MCLs?
- 141.1023 How do the Stage 2A transitional MCLs apply to consecutive systems?

Stage 2B DBPR Requirements

- 141.1030 What routine monitoring is my system required to conduct to demonstrate compliance with Stage 2B final MCLs?
- 141.1031 Am I required to develop a monitoring plan?
- 141.1032 Are there provisions for reduced monitoring for TTHM and HAA5?
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Reporting and Recordkeeping Requirements for Stage 2B

- 141.1070 What do I report to the State?
- 141.1071 What records does subpart XXX require my system to keep?

General Requirements

§141.1000 What are the general requirements of subpart XXX?

The requirements of subpart XXX constitute national primary drinking water regulations. These regulations establish requirements for control of certain disinfection byproducts that supercede some requirements and that are in addition to other requirements that are currently required under subpart L of this part. The regulations in this subpart establish monitoring and other requirements for achieving compliance with maximum contaminant levels for total trihalomethanes (TTHM) and haloacetic acids (five)(HAA5) and fall into three general categories: Initial Distribution System Evaluation (§§141.1010 through 141.1018), Stage 2A

transitional MCLs (§§141.1020 through 141.1023), and Stage 2B MCL compliance (§§141.1030 through 141.1039).

§141.1001 Who is subject to the requirements of subpart XXX?

You are subject to these requirements if your system is a community water system or nontransient noncommunity water system that adds a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

§141.1002 When must my system comply with these requirements?

You must comply with the Stage 2A transitional MCL requirements by [insert date 36 months after publication of the final rule]. You must comply with the Initial Distribution System Evaluation (IDSE) and Stage 2B requirements on the schedule in the following table, based on your system type.

IF YOU ARE THIS TYPE OF SYSTEM	YOU MUST SUBMIT YOUR IDSE REPORT TO THE STATE BY	AND COMPLY WITH STAGE 2B (§§141.1030-.1039) BY: (1)(2)(3)
Subpart H serving \$10,000	[insert date 24 mos following publication]	[insert date 72 mos following publication]
Subpart H serving <10,000	[insert date 48 mos following publication]	[insert date 90 mos following publication](if no monitoring is required under § 141.crypt) OR [insert date 102 mos following publication](if monitoring is required under §141.crypt)
Groundwater serving \$10,000	[insert date 24 mos following publication]	[insert date 72 mos following publication]
Groundwater serving <10,000	[insert date 48 mos following publication]	[insert date 90 mos following publication]
Consecutive system or system with consecutive entry points	-at the same time as the system with the earliest compliance date in the combined distribution system (4)	-at the same time as the system with the earliest compliance date in the combined distribution system

(1) The State may grant up to an additional 24 months for compliance if you require capital improvements under the provisions of section 1412(b)(10) of the SDWA as amended.

(2) If you are required to conduct quarterly monitoring, you must begin monitoring in the first full calendar quarter that follows the compliance date. If you are required to conduct monitoring at a frequency that is less than quarterly, you must begin monitoring in the calendar month recommended in §141.1015 no later than 12 months after the compliance date. If you are not required to submit an IDSE report, you must begin monitoring during the calendar month identified in the monitoring plan developed under §141.1031 no later than 12 months after the compliance date.

(3) If you are required to conduct quarterly monitoring, you must make compliance calculations at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter. If you are required to conduct monitoring at a frequency that is less than quarterly, you must make compliance calculations beginning with the first compliance sample taken after the compliance date.

(4) You must comply beginning [insert date 24 mos following publication] if any system in the combined distribution system serves at least 10,000 people. You must comply beginning [insert date 48 mos following publication] if no system in the combined distribution system serves at least 10,000 people.

§141.1003 What does subpart XXX require?

(a) You must conduct an Initial Distribution System Evaluation (IDSE), unless you meet the criteria in §141.1014(b) or the State has waived the IDSE under §141.1014(c). You must submit an IDSE report, unless the State has waived the IDSE under §141.1014(c).

(b) You must calculate compliance with a locational running annual average (LRAA) for TTHM and HAA5 using monitoring results collected under subpart L for a specified period.

(c) You must monitor at sampling locations and calculate compliance with a locational running annual

average for TTHM and HAA5 using monitoring results collected under this subpart.

(d) *Violations.* You must comply with specific monitoring and reporting requirements. Failure to conduct a required IDSE or to submit a required IDSE report by the date specified in §141.1002 is a monitoring violation. Failure to monitor in accordance with the monitoring plan required under §141.1031 is a monitoring violation. Failure to monitor will also be treated as a violation for the entire period covered by a locational running annual average compliance calculation for the Stage 2A transitional MCLs and Stage 2B MCLs in §141.64(b)(2) and (3).

§141.1004 Are there any other provisions that I need to know?

(a) You may consider multiple wells drawing water from a single aquifer as one treatment plant for determining the minimum number of TTHM and HAA5 samples required, with State approval in accordance with criteria developed under §142.16(h)(5) of this chapter. Approvals made under §141.132(a)(2) remain in effect.

(b) For the purposes of this subpart, each consecutive entry point from a wholesale system to a consecutive system is considered a treatment plant for the consecutive system.

(1) You may request that the State allow multiple consecutive entry points from a single wholesale system to a single consecutive system to be considered one treatment plant.

(2) In the request to the State for approval of multiple consecutive entry points to be considered one treatment plant, You must demonstrate that factors such as relative locations of entry points, detention times, sources, and the presence of treatment (such as corrosion control or booster disinfection) will not have a significant differential effect on TTHM and HAA5 formation associated with individual entry points.

(c) For the purposes of this subpart, a wholesale system that delivers water to a community water system is considered a community water system.

Initial Distribution System Evaluations

§141.1010 What is an Initial Distribution System Evaluation or IDSE?

IDSEs are studies to select compliance monitoring sites that more accurately represent high TTHM and HAA5 levels throughout the distribution system. The studies will be based on either system-specific monitoring or other system-specific data that provide equivalent or better information on site selection for monitoring under §§141.1030-.1039.

§141.1011 Is my system required to conduct an IDSE?

(a) If you are a community water system that adds a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light, you must conduct an IDSE that meets the requirements in §141.1013 or §141.1014. If you are a nontransient noncommunity water system that serves at least 10,000 people and that adds a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light, you must conduct an IDSE that meets the requirements in §141.1013 or §141.1014.

(b) IDSE results will not be used for the purpose of determining compliance with MCLs in §141.64.

§141.1012 What schedule is my system required to meet for the IDSE?

You must prepare for, conduct, analyze, and submit your IDSE report no later than the date specified in §141.1002. If you do not submit your IDSE report to your State, or if you submit the report after the specified date, you must comply with any additional State-specified requirements, which may include conducting another IDSE.

§141.1013 What monitoring is my system required to conduct under the IDSE?

(a) You are required to conduct IDSE monitoring for each treatment plant as indicated in the table in this paragraph. You must analyze each sample for both TTHM and HAA5 at each monitoring location. If approved by the State under the provisions of §141.1004(a), you may consider multiple wells drawing

water from the same aquifer to be one treatment plant for the purpose of determining the number of samples to be taken. You must take one set of samples during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature.

IF YOU ARE THIS TYPE OF SYSTEM	THEN YOU MUST MONITOR	AT THESE LOCATIONS FOR EACH TREATMENT PLANT (1) (2)
Subpart H serving \$10,000	Approximately every 60 days for one year (six sets)	Eight samples per set at locations other than subpart L TTHM/HAA5 monitoring locations based on the following conditions: -If CHLORINE is used as residual: one near distribution system entry point, two at average residence time, five at points representative of highest expected TTHM (three sites) and HAA5 concentration (two sites) -If CHLORAMINE is used as residual for any part of the year: two near distribution system entry point, two at average residence time, four at points representative of highest expected TTHM (two sites) and HAA5 concentration (two sites)
Subpart H serving 500-9,999	Approximately every 90 days for one year (four sets)	Two samples per set at locations other than the subpart L TTHM/HAA5 monitoring location; one each representative of expected high TTHM level and HAA5 level
Subpart H serving <500	Approximately every 180 days for one year (two sets)	Two samples per set at locations other than the subpart L TTHM/HAA5 monitoring location; one each representative of expected high TTHM level and HAA5 level
Groundwater serving \$10,000	Approximately every 90 days for one year (four sets)	Two samples per set at locations other than the subpart L TTHM/HAA5 monitoring location; one each representative of expected high TTHM level and HAA5 level
Groundwater serving < 10,000	Approximately every 180 days for one year (two sets)	Two samples per set at locations other than the subpart L TTHM/HAA5 monitoring location; one each representative of expected high TTHM level and HAA5 level
Consecutive system	At a frequency based on source water and your population (3)	For a system that serves \$10,000 and receives water from a subpart H system: eight samples per set at locations other than the subpart L TTHM/HAA5 compliance monitoring locations; at IDSE locations required of a subpart H system serving \$10,000 For all other consecutive systems: two samples per set at locations other than the subpart L TTHM/HAA5 compliance monitoring location; one each representative of expected high TTHM levels and HAA5 levels

(1) Including treatment plants for consecutive entry points that operate for at least 90 days.

(2) The State may require additional monitoring.

(3) You must monitor at the frequency required of a subpart H system with your population if you deliver any water required to be treated under subpart H. You must monitor at the frequency required of a groundwater system with your population if you deliver no water required to be treated under subpart H.

(b) You must prepare an IDSE monitoring plan prior to starting IDSE monitoring and implement that plan. In the plan, you must identify specific monitoring locations and dates that meet the criteria in

paragraph (a). You must explain any deviations (in either monitoring location or date) in your IDSE report to the State.

§141.1014 What are the alternatives to the IDSE monitoring?

There are three alternatives to the IDSE monitoring.

(a) You may perform an IDSE study based on other system-specific monitoring or system-specific data which will provide equivalent or superior selection of new monitoring sites that target representative high TTHM and HAA5 levels. You must submit an IDSE report that complies with §141.1015.

(b) You are not required to conduct the IDSE if you certify to your State that all compliance samples under subpart L in 2002 and 2003 (for subpart H systems serving \$10,000 people) or in 2004 and 2005 (for systems serving <10,000 people) were #0.040 mg/L for TTHM and #0.030 mg/L for HAA5. If you are a ground water system serving \$10,000 people, you must certify to your State that all TTHM samples taken under §141.30 are #0.040 mg/L and that HAA5 Simulated Distribution System (SDS) DBP test samples analyzed in the absence of HAA5 compliance monitoring under §141.1018 are #0.030 mg/L. You must submit an IDSE report that complies with §141.1015 and contains the required certification.

(c) If you serve fewer than 500 people, you can have the State waive IDSE monitoring if the State determines that the TTHM and HAA5 monitoring site under §141.132 is sufficient to represent both the highest TTHM and the highest HAA5 concentration in your distribution system.

(1) If your IDSE monitoring is waived, you are not required to submit an IDSE report. You must monitor under §§141.1030-141.1039 during the same month and at the same location as used for compliance sampling in subpart L.

(2) If you want to request to not conduct the IDSE under the provisions of §141.1012(c) and the State has not notified you that the IDSE requirement has been waived, you must make the request to the State by [insert date 30 months after publication]. If the State does not approve your request by [insert date 36 months after publication], you must conduct the IDSE.

§141.1015 What do I need to include in my IDSE report?

You must submit data collected under the IDSE to the State according to the schedule in §141.1002. In your submission, you must include:

- (a) All IDSE TTHM and HAA5 analytical results and all relevant data that justify monitoring site selection under §141.1013 (if you conducted IDSE monitoring);
- (b) All studies, reports, data, analytical results, and modeling (if you used an alternative to IDSE monitoring in §141.1014)(a);
- (c) All TTHM and HAA5 analytical results from compliance monitoring conducted during the period of the IDSE;
- (d) All TTHM and HAA5 analytical results from compliance monitoring conducted prior to the period of the IDSE if you are not conducting an IDSE because you meet the provisions of §141.1014(b);
- (e) A schematic of your distribution system (with results, location, and date of all IDSE and compliance samples noted);
- (f) Your original monitoring plan developed under §141.1013(b) and an explanation of any deviations from that plan; and
- (g) Your recommendations and justification for where and during what month(s) TTHM and HAA5 monitoring for Stage 2B should be conducted. You must base your recommendations on the criteria in §141.1016.

§141.1016 How do I select Stage 2B monitoring locations to recommend to the State?

(a) If you are a system required to take four dual (TTHM/HAA5) samples per treatment plant per quarter under routine monitoring under §141.1030, you must base your recommendations on the locations in the distribution system where you expect to find the highest TTHM and HAA5 LRAAs. In determining the highest LRAA, you must include both subpart L compliance data and IDSE data. You must recommend locations with:

- (1) The two highest TTHM locational running annual averages;

- (2) The highest HAA5 running annual average; and
- (3) An existing §141.132(f) compliance monitoring location that is the location of either the highest TTHM or HAA5 LRAA among the three compliance monitoring locations representative of average residence time (by calculating an LRAA for each compliance monitoring using the compliance monitoring results collected during the period of the IDSE).
- (4) You may recommend locations other than those in paragraphs (a)(1)-(3) if you include a rationale for selecting other locations.
- (5) If any of the criteria in this paragraph (a) would cause fewer than four locations per treatment plant to be recommended, you must identify an additional location(s) with the next highest HAA5 LRAA.
- (b) If you are a system required to take two dual (TTHM/HAA5) samples per treatment plant per quarter or per year or one TTHM and one HAA5 sample per plant per year for routine monitoring in §141.1030, you must select the locations with the highest TTHM locational running annual average and highest HAA5 locational running annual average, unless you include a rationale for selecting other locations. If any of the criteria in this paragraph would cause only one location per treatment plant to be recommended, you must identify an additional location with the next highest HAA5 LRAA or request that you be allowed to monitor only at that location.
- (c) If you use the alternative to IDSE monitoring in §141.1014(b), you must identify monitoring locations for Stage 2B that are different than those for subpart L in at least 50% of the total locations required. As a minimum, you must retain the locations with the highest TTHM and HAA5 LRAAs.
- (d) You must schedule a set of samples during the peak historical month for TTHM and HAA5 concentration, unless you provide a rationale for choosing another month. Once you have identified the peak historical month, and if you are required to conduct routine monitoring at least quarterly in §141.1030, you must schedule monitoring at a regular frequency not to exceed approximately every 90 days.
- (e) If you are a consecutive system, your recommendations must comply with §141.1004(b).

§141.1017 How do I determine peak historical months for DBP levels or warmest water temperature?

You must review all available compliance, study, or operational data to determine peak historical month for TTHM or HAA5 levels or warmest water temperature.

§141.1018 How do I conduct HAA5 Simulated Distribution System (SDS) DBP Test if I Have TTHM Compliance Monitoring Data but no HAA5 Data?

If you are a ground water system serving 10,000 persons or more and you have no HAA5 compliance monitoring data, then you may use this test to supplement your TTHM compliance monitoring data to qualify for the alternative to IDSE monitoring in §141.1014(b). You must take two samples per plant and have your results available not later than [insert date nine months after publication].

(a) You must collect two samples of disinfected finished water at the entry point to the distribution system during the month of warmest water temperature no later than [insert date six months following publication]. You must store these samples for a time and at a pH and temperature specified in paragraph (b) to evaluate the potential of the water to form HAA5 under these conditions.

(b) Simulated Distribution System (SDS) DBP test conditions are plant-dependent and must reflect the conditions of the distribution system.

(1) The pH of the samples must be that of the distributed water ± 0.2 .

(2) The SDS test must be conducted at two contact times: one contact time reflecting an average contact time and the second at 90 percent of the maximum contact time in the distribution system.

(3) The sample must be held at a temperature ± 2 degrees centigrade that is comparable to the temperature in the distribution system between the finished water and the average contact time.

(4) The contact time of the SDS test starts when the sample is collected.

(5) If no disinfectant residual is detected at the end of the holding time, the test is not valid and the data cannot be used.

(6) The sample must be extracted within 14 days of sample collection. The HAA5 concentrations, pH,

temperature, contact times, and disinfectant residuals must be reported in the IDSE report. HAA5 samples must be analyzed using certified laboratories and approved methods listed in §141.131.

(c) If you use booster chlorination, then you may not use this test.

Stage 2A Transitional MCL Requirements

§141.1020 Is my system subject to Stage 2A transitional MCL requirements?

You are subject to Stage 2A transitional MCL requirements if you take TTHM and HAA5 compliance samples under subpart L at more than one location in your distribution system. If you take samples at more than one location, you must calculate a locational running annual average (LRAA) for each sampling point and comply with the Stage 2A transitional MCL for TTHM and HAA5 listed in §141.64(b)(2) except as provided for under §141.1023. **[IF YOU ONLY SAMPLE AT ONE DISTRIBUTION SYSTEM LOCATION AND BASE COMPLIANCE ON THAT ONE LOCATION, YOU ARE ALREADY CALCULATING AN LRAA.]**

§141.1021 What monitoring is my system required to conduct under Stage 2A transitional MCL requirements?

You are not required to conduct any additional monitoring. You must continue monitoring as required in subpart L. You may remain on reduced monitoring for as long as you meet the criteria in subpart L. If you have been triggered into increased monitoring under subpart L, you must remain on increased monitoring until you qualify for routine monitoring. You will use the results of TTHM and HAA5 monitoring conducted under subpart L to calculate compliance with the Stage 2A transitional MCL in §141.64(b)(2).

§141.1022 How do I calculate compliance with Stage 2A transitional MCLs?

Each quarter, you must calculate a locational running annual average for each monitoring location that you took TTHM and HAA5 samples at under your monitoring plan developed under §141.132(f) by

averaging the results of the four most recent quarters of TTHM or HAA5 monitoring at that sample location. You must submit these calculations as part of the reports in §141.134.

§141.1023 How do the Stage 2A transitional MCLs apply to consecutive systems?

As a consecutive system, you must comply with the Stage 2A transitional MCL at each monitoring location in your distribution system identified in your monitoring plan developed under §141.132(f).

Stage 2B DBPR Requirements

§141.1030 What routine monitoring is my system required to conduct to demonstrate compliance with Stage 2B final MCLs?

(a) You must monitor at the locations and frequencies listed in the following table.

IF YOU ARE THIS TYPE OF SYSTEM (1)	THEN YOU MUST MONITOR (2)	AT THESE LOCATIONS FOR EACH TREATMENT PLANT (3)
Subpart H serving \$10,000	four dual samples per quarter per treatment plant, taken approximately every 90 days. One quarterly set must be taken during the peak historical month for DBP concentrations.	-locations recommended to the State in the IDSE report submitted under §141.1015
Subpart H serving 500-9,999	two dual samples per quarter per treatment plant, taken approximately every 90 days. One quarterly set must be taken during the peak historical month for DBP concentrations.	-locations recommended to the State in the IDSE report submitted under §141.1015 (4)
Subpart H serving <500	one TTHM and one HAA5 sample per year per treatment plant, taken during the peak historical month for DBP concentrations.	-locations recommended to the State in the IDSE report submitted under §141.1015 (5)
Groundwater serving \$10,000	two dual samples per quarter per treatment plant, taken approximately every 90 days. One quarterly set must be taken during the peak historical month for DBP concentrations.	-locations recommended to the State in the IDSE report submitted under §141.1015 (4)
Groundwater serving 500-9,999	two dual samples per year per treatment plant, taken during the peak historical month for DBP concentrations.	-locations recommended to the State in the IDSE report submitted under §141.1015 (4)
Groundwater serving <500	one TTHM and one HAA5 sample per year per treatment plant, taken during the peak historical month for DBP concentrations.	-locations recommended to the State in the IDSE report submitted under §141.1015 (5)

(1) Consecutive systems must monitor based on their own population and source water, except that consecutive systems that receive water from a subpart H system must monitor as a subpart H system.

(2) “Dual samples” are TTHM and HAA5 compliance samples that are taken at the same time and location for the purpose of determining compliance with the TTHM and HAA5 MCLs under subpart XXX.

(3) Unless the State has approved or required other locations or additional locations based on the IDSE report.

(4) If you have a single location that has both the highest TTHM LRAA and highest HAA5 LRAA, you may take a dual sample only at that location after approval by the State.

(5) You are required to sample for both TTHM and HAA5 at one location if that location is the highest for both TTHM and HAA5. If different locations have high TTHM and HAA5 LRAAs, you may sample for TTHM only at the high TTHM location and for HAA5 only at the high HAA5 location. If you have received a waiver for IDSE monitoring from the State under §141.1014(c), you must monitor for TTHM and HAA5 as dual samples at the subpart L monitoring location (a point representative of maximum residence time) during the month of warmest water temperature.

(b) You must begin monitoring at the locations you have recommended in your IDSE report submitted under §141.1015 following the schedule in §141.1002, unless the State requires other locations or

additional locations after its review. If you have received a waiver under §141.1014(c), you must monitor at the location(s) identified in your monitoring plan in §141.132(f).

(c) You must use an approved method listed in §141.131 for TTHM and HAA5 analyses in this subpart.

§141.1031 Am I required to develop a monitoring plan?

(a) You must develop and implement a monitoring plan to be kept on file for State and public review. You may comply by updating the monitoring plan developed under §141.132(f) no later than the date identified in §141.1002 for Stage 2B compliance. The monitoring plan must contain the following elements:

(1) monitoring locations

(2) monitoring dates

(3) compliance calculation procedures

(4) monitoring plans for any other systems in the combined distribution system

(5) any permits, contracts, or agreements with third parties (including other PWSs, laboratories, and State agencies) to sample, analyze, report, or perform any other system requirement in this subpart.

(b) The monitoring plan will reflect the recommendations of the IDSE report required under §141.1015, unless the State requires otherwise.

(c) If you are a subpart H system serving > 3,300 people, you must submit a copy of your monitoring plan to the State prior to the date you are required to comply with the monitoring plan.

(d) You may modify your monitoring plan to reflect changes in treatment, distribution system operations and layout (including new service areas), or other factors that may affect TTHM or HAA5 formation. If you change monitoring locations, you must replace locations with the lowest LRAA and notify the State as part of the next report due under §141.1070. The State may also require modifications in your monitoring plan.

§141.1032 Are there provisions for reduced monitoring for TTHM and HAA5?

(a) You may reduce monitoring by meeting the criteria in the table in this paragraph at all treatment plants in the system. You may only use data collected under the provisions of this subpart or subpart L to qualify for reduced monitoring.

(b) You may remain on reduced monitoring as long as the TTHM LRAA #0.040 mg/L and the HAA5 LRAA #0.030 mg/L at each monitoring location (for treatment plants with quarterly monitoring) or each TTHM sample #0.060 mg/L and each HAA5 sample #0.045 mg/L (for treatment plants with annual monitoring). In addition, the source water annual average TOC level, before any treatment, must be #4.0 mg/L at each treatment plant treating surface water. If the LRAA at any location exceeds either 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 or if the annual sample at any location exceeds either 0.060 mg/L for TTHM or 0.045 mg/L for HAA5, or if the source water annual average TOC level, before any treatment, >4.0 mg/L at any treatment plant treating surface water, the system must resume routine monitoring under §141.1030 for all treatment plants or begin increased monitoring for all treatment plants if §141.1035 applies.

(c) The State may return your system to routine monitoring at the State's discretion.

§141.1033 [RESERVED]

§141.1034 I am a consecutive system that does not add a disinfectant but delivers disinfected water. Do I have any additional requirements?

Unless required earlier by the State, you must comply with monitoring requirements for chlorine and chloramines in §141.132(c)(1) beginning [insert date three years after publication] and report monitoring results under §141.134(c).

§141.1035 Under what conditions must I increase my monitoring?

If you are required to monitor at a particular location yearly or less frequently than yearly under §141.1030, you must increase monitoring to dual samples once per quarter at all locations if

either the TTHM value >0.080 mg/L or the HAA5 value >0.060 mg/L. You are not in violation until the LRAA calculated based on four quarters of monitoring (or the LRAA calculated based on fewer than four quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters) exceeds the Stage 2B MCLs in §141.64(b)(3). You may return to routine monitoring once you have conducted increased monitoring for at least four quarters and the LRAA for every location is ≤ 0.060 mg/L for TTHM and ≤ 0.045 mg/L for HAA5.

§141.1036 What is a significant excursion and what must I do if one occurs?

(a) A significant excursion occurs when any single TTHM measurement exceeds 0.100 mg/L for TTHM or 0.075 mg/L for HAA5, even if your system is in compliance with the TTHM and HAA5 MCLs.

(b) If a significant excursion occurs, you must conduct a significant excursion evaluation and discuss the evaluation with the State no later than the next sanitary survey for your system. A significant excursion evaluation must include an examination of treatment and distribution system operational practices and how these practices may be modified to reduce TTHM and HAA5 levels.

§141.1037 My system qualified for reduced TTHM and HAA5 monitoring under subpart

L. Can my system remain on reduced monitoring?

You may remain on reduced monitoring until the dates identified in §141.1002 for compliance with §§141.1030-.1039 as long as you continue to meet the criteria for reduced monitoring in subpart L. You may remain on reduced monitoring after these dates if you meet the criteria under §141.1014(b) or §141.1014(c), plus §141.1032(b), and you do not change monitoring locations.

§141.1038 My system is required to conduct increased TTHM and HAA5 monitoring under subpart L because I exceeded either 0.080 mg/L for TTHM or 0.060 mg/L for HAA5 on my annual sample. How long do I remain on increased monitoring?

If your monitoring locations under §141.1030 do not differ from your monitoring locations under subpart L, you must remain on increased monitoring until you qualify for a return to routine monitoring under subpart L or until you qualify for a return to routine monitoring under §141.1035. If your monitoring locations under §141.1030 differ from your monitoring locations under subpart L, you must conduct increased monitoring under §141.1035 at the new monitoring locations beginning at the date identified in §141.1002 for compliance with §§141.1030-.1039 and remain on increased monitoring until you qualify for a return to routine monitoring.

§141.1039 How do I show that my running annual average source water TOC level, before any treatment, is #4.0 mg/L, at a treatment plant that treats surface water or ground water under the direct influence of surface water?

You must take monthly TOC samples approximately every 30 days at a location prior to any treatment. Each quarter, you must calculate a running annual average of quarterly averages of source water TOC using the monitoring results from the past four quarters. This running annual average must be #4.0 mg/L (based on the most recent four quarters of monitoring) on a continuing basis to reduce or remain on reduced monitoring for TTHM and HAA5.

Reporting and Recordkeeping Requirements for Stage 2B

§141.1070 What do I report to the State?

(a) You must report the following information to the State within 10 days of the end of any quarter in which monitoring is required:

- (1) Number of samples taken at each sampling location during the last quarter.
 - (2) Location, date and results of each sample taken during the last quarter, plus an identification of any samples that qualify as significant excursions under §141.1036 (unless the State waives the requirement for identification of samples that qualify as significant excursions under §141.1036 based on a State electronic data management system that can identify significant excursions).
 - (3) Arithmetic average of quarterly results from each location for the last 4 quarters specifying location (LRAAs).
 - (4) Whether the MCL was violated for each location.
- (b) If you are a subpart H system seeking to qualify for or remain on reduced TTHM/HAA5 monitoring, you must report the following source water TOC information to the State within 10 days of the end of any quarter in which monitoring is required:
- (1) The number of source water TOC samples taken each month during last quarter.
 - (2) The location, date and result of each sample taken during last quarter.
 - (3) The quarterly average of monthly samples taken during last quarter.
 - (4) The running annual average (RAA) of quarterly averages from the past four quarters.
 - (5) Whether the RAA exceeded 4.0 mg/L.

§141.1071 What records does subpart XXX require my system to keep?

- (a) You must retain your IDSE monitoring plan, monitoring results, and a complete copy of your IDSE report submitted under §141.1015 for 10 years after the date that you submitted your IDSE report. If the State modifies the monitoring requirements that you recommended in your IDSE report, you must keep a copy of the State's notification on file for 10 years after the date of the State's notification.

(b) You must retain your Stage 2B monitoring plan until three years after any modification.

(c) You must retain your Stage 2B monitoring results for four years or three rounds of monitoring, whichever is longer.

PART 142 RECORDKEEPING, REPORTING, AND SPECIAL PRIMACY

CONDITIONS ARE TO BE DEVELOPED. ANY THOUGHTS/PREFERENCES ON THESE ISSUES?

13. Section 142.14 is proposed to be amended by adding paragraph (a)(8) to read as follows:

§142.14 Records kept by States.

* * * * *

(a) ***

* * * * *

(8) Any decisions made pursuant to the provisions of part 141, subpart XXX of this chapter.

(i) Those systems for which the State has determined that the part 141, subpart L approved monitoring site is representative of the highest TTHM and HAA5.

(ii) System IDSE reports, plus any modifications required by the State.

14. Section 142.15 is proposed to be amended by _____ to read as follows:

§142.15 Reports by States.

DO WE WANT ANY REPORTS SPECIFIC TO THIS RULE?

15. Section 142.16 is proposed to be amended by adding paragraph (k) to read as follows:

§142.16 Special primacy conditions.

* * * * *

(k) *Requirements for States to adopt 40 CFR part 141, subpart XXX.* In addition to the general primacy requirements elsewhere in this part, including the requirements that State regulations be at least as stringent as federal requirements, an application for approval of a State program

revision that adopts 40 CFR part 141, subpart XXX, must contain a description of how the State will accomplish the following program requirements.

(i) For PWSs serving fewer than 500 people, an IDSE blanket waiver procedure or procedure to review requests for IDSE waiver in cases where blanket waiver is not applicable or has not been established.

(ii) A procedure for evaluating system-specific studies under §141.1014(a) of this chapter.

(iii) A procedure for determining that multiple consecutive entry points from a single wholesale system to a single consecutive system should be treated as a single treatment plant for monitoring purposes.

(iv) A procedure for addressing consecutive systems outside the provisions of §141.29 of this chapter or subpart XXX of this chapter, if the State so elects.