

APPENDIX A
STANDARD HEALTH EFFECTS LANGUAGE FOR PUBLIC NOTIFICATION (FEBRUARY 13, 2013)

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard Health Effects Language for Public Notification
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National Primary Drinking Water Regulations (NPDWR) A. Microbiological Contaminants
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1a. Total Coliform †	Zero	See footnote ³	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
1b. Fecal Coliform/ <i>E. coli</i> †	Zero	Zero	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems
1c. Fecal indicator (GWR)	Zero	TT	Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
i. <i>E. coli</i>	None	TT	

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1d. Ground Water Rule (GWR) TT violations	None	TT	Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.
1e. Subpart Y Coliform Assessment and/or Corrective Action Violations †	N/A	TT	<p>Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.</p> <p>[THE SYSTEM MUST USE THE FOLLOWING APPLICABLE SENTENCES.]</p> <p>We failed to conduct the required assessment.</p> <p>We failed to correct all identified sanitary defects that were found during the assessment(s).</p>
1f. Subpart Y <i>E. coli</i> Assessment and/or Corrective Actions Violations †	N/A	TT	<p><i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea,</p>

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1g. E. coli †	Zero	<p>In compliance unless one of the following conditions occurs:</p> <p>(1) The system has an E.coli-positive repeat sample following a total coliform-po</p>	<p>cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for <i>E. coli</i>, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that are found. [THE SYSTEM MUST USE THE FOLLOWING APPLICABLE SENTENCES.]</p> <p>We failed to conduct the required assessment.</p> <p>We failed to correct all identified sanitary defects that were found during the assessment that we conducted.</p> <p><i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.</p>

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		<p>sitive routine sample.</p> <p>(2) The system has a total coliform-positive repeat sample following an E. coli-positive routine sample.</p> <p>(3) The system fails to take all require repeat samples following an E. coli-positive routine sample.</p> <p>(4) The system fails to test for E. coli when any repeat sample tests positive for</p>	

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2a. Turbidity (MCL) ⁴	None	total coliform. 1 NTU ⁵ /5 NTU	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
2b. Turbidity (SWTR TT) ⁶	None	TT ⁷	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
2c. Turbidity (IESWTR TT and LT1ESWTR) ⁸	None	TT	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

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B. Surface Water Treatment Rule (SWTR), Interim Enhanced Surface Water Treatment Rule (IESWTR) and Filter Backwash Recycling Rule (FBRR) violations			
<p>3. Giardia Lamblia (SWTR/IESWTR/LT1ESWTR)</p> <p>4. Viruses (SWTR/IESWTR/LT1ESWTR)</p> <p>5. Heterotrophic plate count (HPC) bacteria⁹ (SWTR/IESWTR/LT1ESWTR)</p> <p>6. Legionella (SWTR/IESWTR/LT1ESWTR)</p> <p>7. Cryptosporidium (IESWTR/FBRR/LT1ESWTR)</p>	<p>Zero</p>	<p>TT¹⁰</p>	<p>Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.</p>

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C. Inorganic Chemicals (IOCs)

8. Antimony	0.006	0.006	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
9. Arsenic ¹¹	None	0.010	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
10. Asbestos (10 Φ m)	7 MFL ¹²	7 MFL	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
11. Barium	2	2	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
12. Beryllium	0.004	0.004	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
13. Cadmium	0.005	0.005	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
14. Chromium (total)	0.1	0.1	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

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15. Cyanide	0.2	0.2	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
16. Fluoride	4.0	4.0	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
17. Mercury (inorganic)	0.002	0.002	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
18. Nitrate	10	10	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
19. Nitrite	1	1	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
20. Total Nitrate and	10	10	Infants below the age of six months who

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Nitrite			<p>drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.</p>
21. Selenium	0.05	0.05	<p>Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.</p>
22. Thallium	0.0005	0.002	<p>Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.</p>

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D. Lead and Copper Rule			
23. Lead	Zero	TT ¹³	<p>Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.</p>
24. Copper	1.3	TT ¹⁴	<p>Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.</p>

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E. Synthetic Organic Chemicals (SOCs)			
25. 2,4-D	0.07	0.07	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
26. 2,4,5-TP (Silvex)	0.05	0.05	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
27. Alachlor	Zero	0.002	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
28. Atrazine	0.003	0.003	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
29. Benzo(a)pyrene (PAHs)	Zero	0.0002	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.
30. Carbofuran	0.04	0.04	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

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31. Chlordane	Zero	0.002	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
32. Dalapon	0.2	0.2	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
33. Di (2-ethylhexyl) adipate	0.4	0.4	Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.
34. Di (2-ethylhexyl) phthalate	Zero	0.006	Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
35. Dibromochloropropane (DBCP)	Zero	0.00004	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
36. Dinoseb	0.007	0.007	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
37. Dioxin (2,3,7,8-TCDD)	Zero	3 x 10 ⁻⁸	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive

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38. Diquat	0.02	0.02	difficulties and may have an increased risk of getting cancer. Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
39. Endothall	0.1	0.1	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
40. Endrin	0.002	0.002	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
41. Ethylene dibromide	Zero	0.00004	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
42. Glyphosate	0.7	0.7	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
43. Heptachlor	Zero	0.0004	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
44. Heptachlor epoxide	Zero	0.0002	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of

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45. Hexachlorobenzene	Zero	0.001	getting cancer. Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
46. Hexachlorocyclo-pentadiene	0.05	0.05	Some people who drink water containing hexachlorocyclo-pentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.
47. Lindane	0.0002	0.0002	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
48. Methoxychlor	0.04	0.04	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
49. Oxamyl (Vydate)	0.2	0.2	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
50. Pentachlorophenol	Zero	0.001	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

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51. Picloram	0.5	0.5	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.
52. Polychlorinated biphenyls (PCBs)	Zero	0.0005	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
53. Simazine	0.004	0.004	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
54. Toxaphene	Zero	0.003	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, and may have an increased risk of getting cancer.
55. 1,2,3-Trichloro propane		0.0006	Some people who drink water containing TCP in excess of the MCL over many years could experience problems with their nervous system, respiratory system, reproductive system, liver and may have an increased risk of getting cancer.

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F. Volatile Organic Chemicals (VOCs)			
56. Benzene	Zero	0.005	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
57. Carbon tetrachloride	Zero	0.005	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
58. Chlorobenzene (monochloro-benzene)	0.1	0.1	Some people who drink water containing Chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
59. <i>o</i> -Dichlorobenzene	0.6	0.6	Some people who drink water containing <i>o</i> -dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
60. <i>p</i> -Dichlorobenzene	0.075	0.075	Some people who drink water containing <i>p</i> -dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
61. 1,2-Dichloroethane	Zero	0.005	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

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62. 1,1-Dichloro ethylene	0.007	0.007	Some people who drink water containing 1-1 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
63. <i>cis</i> -1,2-Dichloro ethylene	0.07	0.07	Some people who drink water containing <i>cis</i> -1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
64. <i>trans</i> -1,2-Dichloro ethylene	0.1	0.1	Some people who drink water containing <i>trans</i> -1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
65. Dichloromethane	Zero	0.005	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
66. 1,2-Dichloro propane	Zero	0.005	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
67. Ethylbenzene	0.7	0.7	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
68. Styrene	0.1	0.1	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

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69. Tetrachloro ethylene	Zero	0.005	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
70. Toluene	1	1	Some people who drink water containing toluene in excess of the MCL over many years could have problems with their nervous system, kidneys or liver.
71. 1,2,4-Trichloro benzene	0.07	0.07	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
72. 1,1,1-Trichloro ethane	0.2	0.2	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
73. 1,1,2-Trichloro ethane	0.003	0.005	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
74. Trichloroethylene	Zero	0.005	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
75. Vinyl chloride	Zero	0.002	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of

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76. Xylenes (total)	10	10	getting cancer. Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

G. Radioactive Contaminants			
77. Beta/photon emitters	Zero	4 mrem/yr ¹⁵	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
78. Alpha emitters	Zero	15 pCi/L ¹⁶	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
79. Combined radium (226 & 228)	Zero	5 pCi/L	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased

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80. Uranium ¹⁷	Zero	30 µg/L	<p>risk of getting cancer. Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.</p>
<p style="text-align: center;">H. Disinfection Byproducts (DBPs), Byproduct Precursors, and Disinfectant Residuals: Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA sets standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAAs)¹⁸</p>			
81. Total trihalomethanes (TTHMs)	N/A	0.080 ^{19, 20}	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.
82. Haloacetic Acids (HAA)	N/A	0.060 ²¹	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
83. Bromate	Zero	0.010	Some people who drink water containing bromate in excess of the MCL over many

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84. Chlorite	0.08	1.0	<p>years may have an increased risk of getting cancer.</p> <p>Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.</p>
85. Chlorine	4 (MRDLG) ²²	4.0 (MRDL) ²³	<p>Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.</p>
86. Chloramines	4 (MRDLG)	4.0 (MRDL)	<p>Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.</p>
87a. Chlorine dioxide, where any 2 consecutive daily samples taken at the entrance to the distribution system are above the MRDL.	0.8 (MRDLG)	0.8 (MRDL)	<p>Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.</p> <p><i>Add for public notification only: the</i></p>

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			<p>chlorine dioxide violations reported today are the result of exceedances at the treatment facility only, not within the distribution system which delivers water to consumers. Continued compliance with chlorine dioxide levels within the distribution system minimizes the potential risk of these violations to consumers.</p>
<p>87b. Chlorine dioxide, where one or more distribution system samples are above the MRDL.</p>	<p>0.8 (MRDLG)</p>	<p>0.8 (MRDL)</p>	<p>Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia. <i>Add for public notification only:</i> The chlorine dioxide violations reported today include exceedances of the EPA standard within the distribution system which delivers water to consumers. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including fetuses, infants, and young children, may be especially susceptible to nervous system effects from excessive chlorine dioxide exposure</p>
<p>88. Control of DBP</p>	<p>None</p>	<p>TT</p>	<p>Total organic carbon (TOC) has no health</p>

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precursors (TOC)			effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
I. Other Treatment Techniques			
89. Acrylamide	Zero	TT	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.
90. Epichlorohydrin	Zero	TT	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

Footnotes to Appendix A

† Until March 31, 2016.

‡ Beginning April 1, 2016.

1. MCLG - Maximum contaminant level goal.

2. MCL - Maximum contaminant level.

3. For water systems analyzing at least 40 samples per month, no more than 5.0 percent of the monthly samples may be positive for total coliforms. For systems analyzing fewer than 40 samples per month,

- no more than one sample per month may be positive for total coliforms.
4. There are various regulations that set turbidity standards for different types of systems, including 40 C.F.R. 141.13, and the 1989 Surface Treatment Rule, the 1998 Interim Enhanced Surface Water Treatment Rule and the 2002 Long Term 1 Enhanced Surface Water Treatment Rule. The MCL for the monthly turbidity average is 1 NTU; the MCL for the 2-day average is 5 NTU for systems that are required to filter but have not yet installed filtration (40 C.F.R. 141.13).
 5. NTU - Nephelometric turbidity unit.
 6. There are various regulations that set turbidity standards for different types of systems, including 40 C.F.R. 141.13, the 1989 Surface Water Treatment Rule, the 1998 Interim Enhanced Surface Water Treatment Rule, and the 2002 Long Term 1 Enhanced Surface Water Treatment Rule. Systems subject to the Surface Water Treatment Rule (both filtered and unfiltered) may not exceed 5 NTU. In addition, in filtered systems, 95 percent of samples each month must not exceed 0.5 NTU in systems using conventional or direct filtration and must not exceed 1 NTU in systems using slow sand or diatomaceous earth filtration or other filtration technologies approved by the state.
 7. TT - Treatment technique.
 8. There are various regulations that set turbidity standards for different types of systems, including 40 C.F.R. 141.13, the 1989 Surface Water Treatment Rule (SWTR), the 1998 Interim Enhanced Surface Water Treatment Rule (IESWTR), and the 2002 Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR). For systems subject to the IESWTR (systems serving at least 10,000 people, using surface water or ground water under the direct influence of surface water), that use conventional filtration or direct filtration, after January 1, 2002, the turbidity level of a system's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a systems's combined filter effluent must not exceed 1 NTU at any time. Systems subject to the IESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration must meet turbidity limits set by the state. For systems subject to the LT1ESWTR (systems serving fewer than 10,000 people, using surface water or ground water under the direct influence of surface water) that use conventional filtration or direct filtration, after January 14, 2005 the turbidity level of a system's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of the monthly measurements, and the turbidity level of a system's combined filter effluent must not exceed 1 NTU at any time. Systems subject to the LT1ESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration must meet turbidity limits set by the State.
 9. The bacteria detected by heterotrophic plate count (HPC) are not necessarily harmful. HPC is simply an alternative method of determining disinfectant residual levels. The number of such bacteria is an indicator of whether there is enough disinfectant in the distribution system.
 10. SWTR, IESWTR, and LT1ESWTR treatment technique violations that involve turbidity exceedances may use the health effects language for turbidity instead.

11. These arsenic values are effective January 23, 2006. Until then, the MCL is 0.05 mg/L and there is no MCLG
12. Millions fibers per liter.
13. Action Level = 0.015 mg/L.
14. Action Level = 1.3 mg/L.
15. Millirems per years.
16. Picocuries per liter.
17. The uranium MCL is effective December 8, 2003 for all community water systems.
18. Surface water systems and ground water systems under the direct influence of surface water are regulated under Subpart H of 40 C.F.R. 141. Subpart H community and non-transient non-community systems serving $\geq 10,000$ must comply with section 11-20-45.1 DBP MCLs and disinfectant maximum residual disinfectant levels (MRDLs) beginning January 1, 2002. All other community and non-transient non-community systems must comply with section 11-20-45.1 DBP MCLs and disinfectant MRDLs beginning January 1, 2004. Subpart H transient non-community systems serving 10,000 or more persons that use chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2002. Subpart H transient non-community systems serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water that use chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2004.
19. Community and non-transient non-community systems must comply with Stage 2 Disinfection Byproduct TTHM and HAA5 MCLs of 0.080 mg/L and 0.060 mg/L, respectively (with compliance calculated as a locational running annual average) on the schedule in section 11-20-45.3(a)(3).
20. The MCL for total trihalomethanes is the sum of the concentrations of the individual trihalomethanes.
21. The MCL for haloacetic acids is the sum of the concentrations of the individual haloacetic acids.
22. MRDLG - Maximum residual disinfectant level goal.
23. MRDL - Maximum residual disinfectant level.

APPENDIX B
 ROUTINE MONITORING FREQUENCY FOR TTHM AND HAA5 (HAR §11-20-45.1(c)(2)(A))

Type of System	Minimum Monitoring Frequency	Sample Location in the distribution system
Subpart H system serving at least 10,000 persons.	Four water samples per quarter per treatment plant.	At least 25 per-cent of all samples collected each quarter at locations representing maximum residence time. Remaining samples taken at locations representative of at least average residence time in the distribution system and representing the entire distribution system, taking into account number of persons served, different sources of water, and different treatment methods ¹ .
Subpart H system serving from 500 to 9,999 persons.	One water sample per quarter per treatment plant.	Locations representing maximum residence time ¹ .

APPENDIX B
 ROUTINE MONITORING FREQUENCY FOR TTHM AND HAA5 (HAR §11-20-45.1(c)(2)(A))

Type of System	Minimum Monitoring Frequency	Sample Location in the distribution system
Subpart H system serving fewer than 500 persons.	One sample per year per treatment plant during month of warmest water temperature.	Locations representing maximum residence time ¹ . If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, system must increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until system meets reduced monitoring criteria in HAR §11-20-45.1(c)(2)(A)(iv).
System using only ground water not under direct influence of surface water using chemical disinfectant and serving at least 10,000 persons.	One water sample per quarter per treatment plant ² .	Locations representing maximum residence time ¹ .

APPENDIX B
 ROUTINE MONITORING FREQUENCY FOR TTHM AND HAA5 (HAR §11-20-45.1(c)(2)(A))

Type of System	Minimum Monitoring Frequency	Sample Location in the distribution system
System using only ground water not under direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons.	One sample per year per treatment plant ² during month of warmest water temperature	Locations representing maximum residence time ¹ . If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, system must increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until system meets criteria in HAR §11-20-45.1(c)(2)(A)(iv).

¹If a system elects to sample more frequently than the minimum required, at least 25 percent of all samples collected each quarter (including those taken in excess of the required frequency) must be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples must be taken at locations representative of at least average residence time in the distribution system.

²Multiple wells drawing water from a single aquifer may be considered one treatment plant for determining the minimum number of samples required, with State approval in accordance with criteria developed under HAR §11-20-45.1(c)(1)(B).

APPENDIX C
 REDUCED MONITORING FREQUENCY FOR TTHM AND HAA5 (HAR §11-20-45.1(c)(2)(A))

If you are a...	You may reduce monitoring if you have monitored at least one year and your...	To this level
Subpart H system serving at least 10,000 persons which has a source water annual average TOC level, before any treatment, of <4.0 mg/L.	TTHM annual average <0.040 mg/L and HAA5 annual average <0.030 mg/L.	One sample per treatment plant per quarter at distribution system location reflecting maximum residence time.
Subpart H system serving from 500 to 9,999 persons which has a source water annual average TOC level, before any treatment, of <4.0 mg/L.	TTHM annual average <0.040 mg/L and HAA5 annual average <0.030 mg/L.	One sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature. NOTE: Any Subpart H system serving fewer than 500 persons may not reduce its monitoring to less than one sample per treatment plant per year.

APPENDIX C
 REDUCED MONITORING FREQUENCY FOR TTHM AND HAA5 (HAR §11-20-45.1(c)(2)(A))

If you are a...	You may reduce monitoring if you have monitored at least one year and your...	To this level
System using only groundwater not under direct influence of surface water using chemical disinfectant and serving at least 10,000 persons.	TTHM annual average <0.040 mg/L and HAA5 annual average <0.030 mg/L.	One sample per treatment plant per year at distribution system location reflecting maximum residence time during month of warmest water temperature.
System using only ground water not under direct influence of surface water using chemical disinfectant and serving fewer than 10,000 persons.	TTHM annual average <0.040 mg/L and HAA5 annual average <0.030 mg/L for two consecutive years OR TTHM annual average <0.020 mg/L and HAA5 annual average <0.015 mg/L for one year.	One sample per treatment plant per three year monitoring cycle at distribution system location reflecting maximum residence time during month of warmest water temperature, with the three-year cycle beginning on January 1 following quarter in which system qualifies for reduced monitoring.

APPENDIX D
 REPORTING REQUIREMENTS FOR DISINFECTION BYPRODUCTS (HAR §11-20-45.1(e)(2))

If you are a ...	You must report... ¹
1. System monitoring for TTHM and HAA5 under the requirements of §11-20-45.1(c)(2) on a quarterly or more frequent basis.	I. The number of samples taken during the last quarter. II. The location, date and result of each sample taken during the last quarter. III. The arithmetic average of all samples taken in the last quarter. IV. The annual arithmetic average of the quarterly arithmetic averages of this section for the last four quarters. V. Whether, based on HAR §11-20-45.1(d)(2)(A), the MCL was violated.
2. System monitoring for TTHM and HAA5 under the requirements of §11-20-45.1(c)(2) less frequently than quarterly (but at least annually).	I. The number of samples taken during the last year. II. The location, date and result of each sample taken during the last monitoring period. III. The arithmetic average of all samples taken over the last year. IV. Whether, based on HAR §11-20-45.1(d)(2)(A), the MCL was exceeded.

APPENDIX D
 REPORTING REQUIREMENTS FOR DISINFECTION BYPRODUCTS (HAR §11-20-45.1(e)(2))

<p>3. System monitoring for TTHM and HAA5 under the requirements of §11-20-45.1(c)(2) less frequently than annually.</p>	<p>I. The location, date and result of the last sample taken. II. Whether, based on HAR §11-20-45.1(d)(2)(A), the MCL was violated.</p>
<p>4. System monitoring for chlorite under the requirements of §11-20-45.1(c)(2).</p>	<p>I. The number of entry point samples taken each month for the last 3 months. II. The location, date and result of each sample (both entry point and distribution system) taken during the last quarter. III. For each month in the reporting period, the arithmetic average of all samples taken in each 3-samples set taken in the distribution system. IV. Whether, based on HAR §11-20-45.1(d)(2)(C), the MCL was violated, and how many times it was violated each month.</p>

APPENDIX D
REPORTING REQUIREMENTS FOR DISINFECTION BYPRODUCTS (HAR §11-20-45.1(e)(2))

5. System monitoring for bromate under the requirements of §11-20-45.1(c)(2).	I. The number of samples taken during the last quarter. II. The location, date and result of each sample taken during the last quarter. III. The arithmetic average of the monthly arithmetic averages of all samples taken in the last year. IV. Whether, based on HAR §11-20-45.1(d)(2)(B) the MCL was violated.
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¹The State may choose to perform calculations and determine whether the MCL was exceeded, in lieu of having the system report that information.

APPENDIX E
 REPORTING REQUIREMENTS FOR DISINFECTANT RESIDUALS (HAR §11-20-45.1(e)(3))

If you are a ...	You must report... ¹
1. System monitoring for chlorine or chloramines under the requirements of §11-20-45.1(c)(3).	I. The number of samples taken during each month of the last quarter. II. The monthly arithmetic average of all samples taken in each month for the last 12 months. III. The arithmetic average of the monthly averages for the last 12 months. IV. Whether, based on §11-20-45.1(d)(3)(A), the MRDL was violated.
2. System monitoring for chlorine dioxide under the requirements of §11-20-45.1(c)(3).	I. The dates, result, and locations of samples taken during the last quarter. II. Whether, based on §11-20-45.1(d)(3)(B), the MRDL was violated. III. Whether the MRDL was exceeded in any two consecutive daily samples and whether the resulting violation was acute or nonacute.

¹The State may choose to perform calculations and determine whether the MRDL was exceeded, in lieu of having the system report that information.

APPENDIX F
 REPORTING REQUIREMENTS FOR DISINFECTION BYPRODUCT PRECURSORS AND
 ENHANCED COAGULATION OR ENHANCED SOFTENING (HAR §11-20-45.1(e)(4))

If you are a ...	You must report... ¹
1. System monitoring monthly or quarterly for TOC under the requirements of §11-20-45.1(c)(4) and required to meet the enhanced coagulation or enhanced softening requirements in §11-20-45.1(f)(2)(B) or (C).	I. The number of paired (source water and treated water) samples taken during the last quarter. II. The location, date and results of each paired sample and associated alkalinity taken during the last quarter. III. For each month in the reporting period that paired samples were taken, the arithmetic average of the percent reduction of TOC for each paired sample and the required TOC percent removal. IV. Calculations for determining compliance with the TOC percent removal requirements, as provided in §11-20-45.1(f)(3)(A). V. Whether the system is in compliance with the enhanced coagulation or enhanced softening percent removal requirements in §11-20-45.1(f)(2) for the last four quarters.

APPENDIX F
 REPORTING REQUIREMENTS FOR DISINFECTION BYPRODUCT PRECURSORS AND
 ENHANCED COAGULATION OR ENHANCED SOFTENING (HAR §11-20-45.1(e)(4))

<p>2. System monitoring monthly or quarterly for TOC under the requirements of §11-20-45.1(c)(4) and meeting one or more of the alternative compliance criteria in §11-20-45.1(f)(1)(B) or (C).</p>	<p>I. The alternative compliance criterion that the system is using.</p> <p>II. The number of paired samples taken during the last quarter.</p> <p>III. The location, date and result of each paired sample and associated alkalinity taken during the last quarter.</p> <p>IV. The running annual arithmetic average based on monthly averages (or quarterly samples) of source water TOC for systems meeting a criterion in §11-20-45.1(f)(1)(B)(i) or (iii) or of treated water TOC for systems meeting the criterion in §11-20-45.1(f)(1)(B)(ii).</p> <p>V. The running annual arithmetic average based on monthly averages (or quarterly samples) of source water SUVA for systems meeting the criterion in §11-20-45.1(f)(1)(B)(v) or of treated water SUVA for systems meeting the criterion in §11-20-45.1(f)(1)(B)(vi).</p>
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APPENDIX F
 REPORTING REQUIREMENTS FOR DISINFECTION BYPRODUCT PRECURSORS AND
 ENHANCED COAGULATION OR ENHANCED SOFTENING (HAR §11-20-45.1(e)(4))

	<p>VI. The running annual average of source water alkalinity for systems meeting the criterion in §11-20-45.1(f)(1)(B)(iii) and of treated water alkalinity for systems meeting the criterion in §11-20-45.1(f)(1)(C)(i).</p> <p>VII. The running annual average for both TTHM and HAA5 for systems meeting the criterion in §11-20-45.1(f)(1)(B)(iii) or (iv).</p> <p>VIII. The running annual average of the amount of magnesium hardness removal (as CaCo₃ in mg/L) for systems meeting the criterion in §11-20-45.1(f)(1)(C)(ii).</p> <p>IX. Whether the system is in compliance with the particular alternative compliance criterion in §11-20-45.1(f)(1)(B) or (C).</p>
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¹The State may choose to perform calculations and determine whether the treatment technique was met, in lieu of having the system report that information.

APPENDIX G

NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE (FEBRUARY 13, 2013)¹

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				
A. Microbiological Contaminants				
1.a Total coliform bacteria †	2	141.63 (a)	3	141.21 (a) - (e)
1.b Total coliform (Monitoring or TT violations resulting from failure to perform assessments or corrective actions) ‡	2	141.860 (b)	3	141.860 (c)
2.a Fecal coliform/ E. coli †	1	141.63 (b)	⁴ 1, 3	141.21 (e)
2.b E. coli †	1	141.860 (a)	3	141.860 (c) 141.860 (d) (2)
2.c E. coli (TT violations resulting from failure to perform level 2 Assessments or corrective action)	2	141.860 (b)
3. Turbidity MCL	2	141.13 (a)	3	141.22
4. Turbidity MCL (average of 2 days= samples >5NTU)	⁵ 2, 1	141.13 (b)	3	141.22
5. Turbidity (for TT violations resulting from a single exceedance of maximum allowable turbidity)	⁶ 2, 1	141.71 (a) (2), 141.71 (c) (2) (i), 141.73 (a) (2), 141.73 (b) (2), 141.73 (c) (2),	3	141.74 (a) (1), 141.74 (b) (2), 141.74 (c) (1), 141.174 141.560 (a) - (c)

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NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE (FEBRUARY 13, 2013)¹

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
level)		141.73(d), 141.173(a)(2), 141.173(b) 141.551(b)		141.561
6. Surface Water Treatment Rule violations, other than violations resulting from single exceedance of max. allowable turbidity level (TT)	2	141.70-141.73	3	141.74
7. Interim Enhanced Surface Water Treatment Rule violations, other than violations resulting from single exceedance of max. turbidity level (TT)	2	⁷ 141.170-141.173 141.500-141.553	3	141.172, 141.174 141.530-141.544 141.560-141.564
8. Filter Backwash Recycling Rule violations	2	141.76(c)	3	141.76(b), (d)
9. Long Term 1 Enhanced Surface Water Treatment Rule violations	2	141.500-141.553	3	141.530-141.544, 141.560-141.564
10. LT2ESWTR violations	2	141.710-141.720	²² 2, 3	141.701-141.705 and 141.708-141.709
11. Ground Water Rule violations	2	141.404	3	141.402(h), 141.403(d)

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NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE (FEBRUARY 13, 2013)¹

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
B. Inorganic Chemicals (IOCs)				
1. Antimony	2	141.62 (b)	3	141.23 (a), (c)
2. Arsenic	2	⁸ 141.11 (b)	3	¹¹ 141.23 (a), (c)
3. Asbestos (fibers >10 µm)	2	141.62 (b)	3	141.23 (a) - (b)
4. Barium	2	141.62 (b)	3	141.23 (a), (c)
5. Beryllium	2	141.62 (b)	3	141.23 (a), (c)
6. Cadmium	2	141.62 (b)	3	141.23 (a), (c)
7. Chromium (total)	2	141.62 (b)	3	141.23 (a), (c)
8. Cyanide	2	141.62 (b)	3	141.23 (a), (c)
9. Fluoride	2	141.62 (b)	3	141.23 (a), (c)
10. Mercury (inorganic)	2	141.62 (b)	3	141.23 (a), (c)
11. Nitrate	1	141.62 (b)	¹² 1, 3	141.23 (a), (d), 141.23 (f) (2)
12. Nitrite	1	141.62 (b)	¹² 1, 3	141.23 (a), (e), 141.23 (f) (2)
13. Total Nitrate and Nitrite	1	141.62 (b)	3	141.23 (a)
14. Selenium	2	141.62 (b)	3	141.23 (a), (c)
15. Thallium	2	141.62 (b)	3	141.23 (a), (c)
C. Lead and Copper Rule (Action Level for lead is 0.015 mg/L, for copper is 1.3 mg/L)				
1. Lead and Copper Rule (TT)	2	141.80-141.85	3	141.86-141.89
D. Synthetic Organic Chemicals (SOCs)				
1. 2,4-D	2	141.61 (c)	3	141.24 (h)
2. 2,4,5-TP (Silvex)	2	141.61 (c)	3	141.24 (h)
3. Alachlor	2	141.61 (c)	3	141.24 (h)

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NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE (FEBRUARY 13, 2013)¹

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
4. Atrazine	2	141.61 (c)	3	141.24 (h)
5. Benzo(a)pyrene (PAHs)	2	141.61 (c)	3	141.24 (h)
6. Carbofuran	2	141.61 (c)	3	141.24 (h)
7. Chlordane	2	141.61 (c)	3	141.24 (h)
8. Dalapon	2	141.61 (c)	3	141.24 (h)
9. Di (2-ethylhexyl) adipate	2	141.61 (c)	3	141.24 (h)
10. Di (2-ethylhexyl) phthalate	2	141.61 (c)	3	141.24 (h)
11. Dibromochloropropane	2	141.61 (c)	3	141.24 (h)
12. Dinoseb	2	141.61 (c)	3	141.24 (h)
13. Dioxin (2,3,7,8-TCDD)	2	141.61 (c)	3	141.24 (h)
14. Diquat	2	141.61 (c)	3	141.24 (h)
15. Endothall	2	141.61 (c)	3	141.24 (h)
16. Endrin	2	141.61 (c)	3	141.24 (h)
17. Ethylene dibromide	2	141.61 (c)	3	141.24 (h)
18. Glyphosate	2	141.61 (c)	3	141.24 (h)
19. Heptachlor	2	141.61 (c)	3	141.24 (h)
20. Heptachlor epoxide	2	141.61 (c)	3	141.24 (h)
21. Hexachlorobenzene	2	141.61 (c)	3	141.24 (h)
22. Hexachlorocyclopentadiene	2	141.61 (c)	3	141.24 (h)
23. Lindane	2	141.61 (c)	3	141.24 (h)
24. Methoxychlor	2	141.61 (c)	3	141.24 (h)
25. Oxamyl (Vydate)	2	141.61 (c)	3	141.24 (h)
26. Pentachlorophenol	2	141.61 (c)	3	141.24 (h)
27. Picloram	2	141.61 (c)	3	141.24 (h)
28. Polychlorinated biphenyls (PCBs)	2	141.61 (c)	3	141.24 (h)
29. Simazine	2	141.61 (c)	3	141.24 (h)
30. Toxaphene	2	141.61 (c)	3	141.24 (h)

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NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE (FEBRUARY 13, 2013)¹

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
31. 1,2,3-Trichloropropane	2	11-20-4(d)	3	11-20-12(e)
E. Volatile Organic Chemicals (VOCs)				
1. Benzene	2	141.61(a)	3	141.24(f)
2. Carbon tetrachloride	2	141.61(a)	3	141.24(f)
3. Chlorobenzene (monochlorobenzene)	2	141.61(a)	3	141.24(f)
4. o-Dichlorobenzene	2	141.61(a)	3	141.24(f)
5. p-Dichlorobenzene	2	141.61(a)	3	141.24(f)
6. 1,2-Dichloroethane	2	141.61(a)	3	141.24(f)
7. 1,1-Dichloroethylene	2	141.61(a)	3	141.24(f)
8. cis-1,2-Dichloroethylene	2	141.61(a)	3	141.24(f)
9. trans-1,2-Dichloroethylene	2	141.61(a)	3	141.24(f)
10. Dichloromethane	2	141.61(a)	3	141.24(f)
11. 1,2-Dichloropropane	2	141.61(a)	3	141.24(f)
12. Ethylbenzene	2	141.61(a)	3	141.24(f)
13. Styrene	2	141.61(a)	3	141.24(f)
14. Tetrachloroethylene	2	141.61(a)	3	141.24(f)
15. Toluene	2	141.61(a)	3	141.24(f)
16. 1,2,4-Trichlorobenzene	2	141.61(a)	3	141.24(f)
17. 1,1,1-Trichloroethane	2	141.61(a)	3	141.24(f)
18. 1,1,2-Trichloroethane	2	141.61(a)	3	141.24(f)
19. Trichloroethylene	2	141.61(a)	3	141.24(f)
20. Vinyl chloride	2	141.61(a)	3	141.24(f)
21. Xylenes (total)	2	141.61(a)	3	141.24(f)

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NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE (FEBRUARY 13, 2013)¹

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
F. Radioactive Contaminants				
1. Beta/photon emitters	2	141.66(d)	3	141.25(a), 141.26(b)
2. Alpha emitters	2	141.66(c)	3	141.25(a), 141.26(a)
3. Combined radium (226 & 228)	2	141.66(b)	3	141.25(a), 141.26(a)
4. Uranium	⁹²	141.66(e)	¹⁰³	141.25(a), 141.26(a)
G. Disinfection Byproducts (DBPs), Byproduct Precursors, Disinfectant Residuals. Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA sets standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAAs). ¹³				
1. Total trihalomethanes (TTHMs)	2	¹⁴ 141.64(b)	3	141.132(a) - (b), 141.600-141.605, 141.620-141.629
2. Haloacetic Acids (HAA5)	2	141.64(b)	3	141.132(a) - (b), 141.600-141.605,

APPENDIX G

NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE (FEBRUARY 13, 2013)¹

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
3. Bromate	2	141.64 (a)	3	141.620-141.629 141.132 (a) - (b)
4. Chlorite	2	141.64 (a)	3	141.132 (a) - (b)
5. Chlorine (MRDL)	2	141.65 (a)	3	141.132. (a), (c)
6. Chloramine (MRDL)	2	141.65 (a)	3	141.132 (a), (c)
7. Chlorine dioxide (MRDL), where any 2 consecutive daily samples at entrance to distribution system only are above MRDL	2	141.65 (a) 141.133 (c) (3)	¹⁵ 2, 3	141.132 (a), (c), 141.133 (c) (2)
8. Chlorine dioxide (MRDL), where samples(s) in distribution system the next day are also above MRDL	¹⁶ 1	141.65 (a), 141.133 (c) (3)	1	141.132 (a), (c), 141.133 (c) (2)
9. Control of DBP precursors- TOC (TT)	2	141.135 (a) - (b)	3	141.132 (a), (d)
10. Bench marking and disinfection profiling	N/A	N/A	3	141.172 141.530-141.544
11. Development of monitoring plan	N/A	N/A	3	141.132 (f)
H. Other Treatment Techniques				
1. Acrylamide (TT)	2	141.111	N/A	N/A
2. Epichlorohydrin (TT)	2	141.111	N/A	N/A
II. Unregulated Contaminant Monitoring ¹⁷ :				
A. Unregulated contaminants	N/A	N/A	3	141.40
B. Nickel	N/A	N/A	3	141.23 (c), (k)

APPENDIX G

NPDWR VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE (FEBRUARY 13, 2013)¹

Contaminant	MCL/MRDL/TT Violations ²		Monitoring & Testing Procedure Violations	
	Tier of Public Notice Required	Citation	Tier of Public Notice Required	Citation
III. Public Notification for Variances and Exemptions:				
A. Operation under a variance or exemption	3	¹⁸ 1415, 1416	N/A	N/A
B. Violation of conditions of a variance or exemption	2	1415, 1416, ¹⁹ 142.307	N/A	N/A
IV. Other Situations Requiring Public Notification:				
A. Fluoride secondary maximum contaminant level (SMCL) exceedance	3	143.3	N/A	N/A
B. Exceedance of nitrate MCL for non-community systems, as allowed by State	1	141.11(d)	N/A	N/A
C. Availability of unregulated contaminant monitoring data	3	141.40	N/A	N/A
D. Waterborne disease outbreak	1	141.2, 141.71(c)(2)(ii)	N/A	N/A
E. Other waterborne emergency ²⁰	1	N/A	N/A	N/A
F. Source Water Sample Positive for GWR Fecal indicators: <i>E. coli</i> , enterococci, or coliphage	1	141.402(g)	N/A	N/A
G. Other situations as determined by the State	²¹ 1, 2, 3	N/A	N/A	N/A

APPENDIX G - FOOTNOTES

† Until March 31, 2016.

‡ Beginning April 1, 2016.

1. Violations and other situations not listed in this table (e.g. failure to prepare Consumer Confidence Reports), do not require notice, unless otherwise determined by the state. States may, at their option, also require a more stringent public notice tier (e.g. Tier 1 instead of Tier 2 or Tier 2 instead of Tier 3) for specific violations and situations listed in this Appendix, as authorized under §141.202(a) and §141.203(a).
2. MCL-Maximum contaminant level, MRDL-Maximum residual disinfectant level, TT-Treatment technique.
3. The term Violations of National Primary Drinking Water Regulations (NPDWR) is used here to include violations of MCL, MRDL, treatment technique, monitoring, and testing procedure requirements.
4. Failure to test for fecal coliform or E. coli is a Tier 1 violation if testing is not done after any repeat sample tests positive for coliform. All other total coliform monitoring and testing procedure violations are Tier 3.
5. Systems that violate the turbidity MCL of 5 NTU based on an average of measurements over two consecutive days must consult with the state within 24 hours after learning of the violation. Based on this consultation, the state may subsequently decide to elevate the violation to Tier 1. If a system is unable to make contact with the state in the 24-hour period, the violation is automatically elevated to Tier 1.
6. Systems with treatment technique violations involving a single exceedance of a maximum turbidity limit under the Surface Water Treatment Rule (SWTR), the Interim Enhanced Surface Water Treatment rule (IESWTR) or the Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) are required to consult with the state within 24 hours after learning of the violation. Based on this consultation, the state may subsequently decide to elevate the violation to Tier 1. If a system is unable to make contact with the state in the 24-hour period, the violation is automatically elevated to Tier 1.
7. Most of the requirements of the Interim Enhanced Surface Water Treatment Rule (63FR69477) (40C.F.R. §§141.170-141.171, 141.173-141.174) become effective January 1, 2002 for Subpart H systems (surface water systems and ground water systems under the direct influence of surface water) serving at least 10,000 persons. However, 40C.F.R. §141.172 has some requirements that become effective as early as April 16, 1999. The Surface Water Treatment Rule remains in effect for systems serving at least 10,000 persons even after 2002; the Interim Enhanced Surface Water Treatment Rule adds additional requirements and does not in many cases supercede the SWTR.
8. The arsenic MCL citations are effective January 23, 2006. Until then, the citations are §141.11 (b) and §141.23 (n).
9. The uranium MCL Tier 2 violation citations are effective December 8, 2003 for all community water systems.
10. The uranium Tier 3 violation citations are effective December 8, 2000 for all community water systems.

11. The arsenic Tier 3 violation MCL citations are effective January 23, 2006. Until then, the citations are §141.23(a), (1).
12. Failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL is a Tier 1 violation. Other monitoring violations for nitrate are Tier 3.
13. Subpart H community and non-transient non-community systems serving > 10,000 must comply with new DBP MCLs, disinfectant MRDLs, and related monitoring requirements beginning January 1, 2002. All other community and non-transient non-community systems must meet the MCLs and MRDLs beginning January 1, 2004. Subpart H transient non-community systems serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2002. Subpart H transient non-community systems serving fewer than 10,000 persons and using only ground water not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2004.
14. §141.64(b)(1) and §141.132(a)-(b) apply until §§141.620-141.630 take effect under the schedule in §141.620(c).
15. Failure to monitor for chlorine dioxide at the entrance to the distribution system the day after exceeding the MRDL at the entrance to the distribution system is a Tier 2 violation.
16. If any daily sample taken at the entrance to the distribution system exceeds the MRDL for chlorine dioxide and one or more samples taken in the distribution system the next day exceed the MRDL, Tier 1 notification is required. Failure to take the required samples in the distribution system after the MRDL is exceeded at the entry point also triggers Tier 1 notification.
17. Some water systems must monitor for certain unregulated contaminants listed in 40 C.F.R. §141.40.
18. This citation refers to §§1415 and 1416 of the Safe Drinking Water Act. §§1415 and 1416 require that "a schedule prescribed...for a public water system granted a variance (or exemption) shall require compliance by the system..."
19. In addition to §§1415 and 1416 of the Safe Drinking Water Act, 40 C.F.R. 142.307 specifies the items and schedule milestones that must be included in a variance for small systems.
20. Other waterborne emergencies require a Tier 1 public notice under §141.202(a) for situations that do not meet the definition of a waterborne disease outbreak given in 40 C.F.R. 141.2 but that still have the potential to have serious adverse effects on health as a result of short-term exposure. These could include outbreaks not related to treatment deficiencies, as well as situations that have the potential to cause outbreaks, such as failures or significant interruption in water treatment processes, natural disasters that disrupt the water supply or distribution system, chemical spills, or unexpected loading of possible pathogens into the source water.
21. States may place other situations in any tier they believe appropriate, based on threat to public health.
22. Failure to collect three or more samples for *Cryptosporidium* analysis is a Tier 2 violation requiring special notice as specified in §141.211. All other monitoring and testing procedure violations are

a Tier 3.

APPENDIX H

LIST OF ACRONYMS USED IN PUBLIC NOTIFICATION REGULATION

CCR	Consumer Confidence Report
CWS	Community Water System
DBP	Disinfection Byproduct
EPA	Environmental Protection Agency
GWR	Ground Water Rule
HPC	Heterotrophic Plate Count
IESWTR	Interim Enhanced Surface Water Treatment Rule
IOC	Inorganic Chemical
LCR	Lead and Copper Rule
LT1ESWTR	Long Term 1 Enhanced Surface Water Treatment Rule
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
NCWS	Non-Community Water System
NPDWR	National Primary Drinking Water Regulation
NTNCWS	Non-Transient Non-Community Water System
NTU	Nephelometric Turbidity Unit
OGWDW	Office of Ground Water and Drinking Water
OW	Office of Water
PN	Public Notification
PWS	Public Water System
SDWA	Safe Drinking Water Act
SMCL	Secondary Maximum Contaminant Level
SOC	Synthetic Organic Chemical
SWTR	Surface Water Treatment Rule
TCR	Total Coliform Rule
TT	Treatment Technique
TWS	Transient Non-Community Water System
VOC	Volatile Organic Chemical

APPENDIX I

**Table C - List of Small Systems Compliance Technologies for Radionuclides
And Limitations to Use**

Unit technologies	Limitations (see foot- notes)	Operator skill level required ¹	Raw water quality range and considerations ¹
1. Ion exchange (IE)	(a)	Intermediate	All ground waters
2. Point of Use (POU) ² (IE)	(b)	Basic	All ground waters
3. Reverse osmosis (RO)	(c)	Advanced	Surface waters usually require prefiltration
4. POU ² (RO)	(b)	Basic	Surface waters usually require prefiltration
5. Lime softening	(d)	Advanced	All waters
6. Green sand filtration	(e)	Basic	
7. Co-precipitation with Barium sulfate	(f)	Intermediate to Advanced	Ground water with suitable water quality
8. Electrodialysis/electrodialysis reversal		Basic to intermediate	All ground waters
9. Pre-formed hydrous Manganese oxide filtration	(g)	Intermediate	All ground waters
10. Activated alumina	(a),(h)	Advanced	All ground waters, competing anion concentrations may affect regeneration frequency
11. Enhanced coagulation/filtration	(i)	Advanced	Can treat a wide range of water qualities

1. National Research Council (NRC), Safe Water from Every Tap: Improving Water Service to Small Communities. National Academy Press, Washington, D.C. 1997
2. A POU, or "point-of-use" technology is a treatment device installed at a single tap used for the purpose of reducing contaminants in drinking water at that one tap. POU devices are typically installed at the kitchen tap. See the April 21, 2000 NODA for more details.

Limitations Footnotes: Technologies for Radionuclides

- a The regeneration solution contains high concentrations of the contaminant ions. Disposal options should be carefully considered before choosing this technology.
- b When POU devices are used for compliance, programs for long-term operation, maintenance, and monitoring must be provided by water utility to ensure proper performance.
- c Reject water disposal options should be carefully considered before choosing the technology. See other RO limitations described in the SWTR Compliance Technologies Table.
- d The combination of variable source water quality and the complexity of the water chemistry involved may make this technology too complex for small surface water systems.
- e Removal efficiencies can vary depending on water quality.
- f The technology may be very limited in application to small systems. Since the process requires static mixing, detention basins, and filtration, it is most applicable to systems with sufficiently high sulfate levels that already have a suitable filtration treatment train in place.
- g This technology is most applicable to small systems that already have filtration in place.
- h Handling of chemicals required during regeneration and pH adjustment may be too difficult for small systems without an adequately trained operator.
- i Assumes modification to a coagulation/filtration process already in place.

APPENDIX J

Table D - Compliance Technologies by System Size Category for Radionuclide NPDWR's

Contaminant	Compliance technologies ¹ for system size categories (population served)		3,300 - 10,000
	25 - 500	501 - 3,300	
1. Combined radium-226 and radium-228	1,2,3,4,5,6,7,8,9	1,2,3,4,5,6,7,8,9	1,2,3,4,5,6,7,8,9
2. Gross alpha particle activity	3,4	3,4	3,4
3. Beta particle activity and photon activity	1,2,3,4	1,2,3,4	1,2,3,4
4. Uranium	1,2,4,10, 11	1,2,3,4,5,10,11	1,2,3,4,5,10,11

Note: ¹Numbers correspond to those technologies found listed in the table C of Appendix I.

APPENDIX K - ANALYTICAL METHODS FOR CONDUCTING TOTAL COLIFORM AND E. COLI ANALYSES
(HAR §11-20-9.1(b))

Organism	Methodology Category	Method ¹	Citation ¹
Total Coliforms	Lactose Fermentation Methods	Standard Total Coliform Fermentation Technique	Standard Methods 9221 B.1, B.2 (20 th ed.; 21 st ed.) ^{2, 3} Standard Methods Online 9221 B.1, B.2-99 ^{2, 3}
		Presence-Absence (P-A) Coliform Test	Standard Methods 9221 D.1, D.2 (20 th ed.; 21 st ed.) ^{2, 7} Standard Methods Online 9221 D.1, D.2-99 ^{2, 7}
	Membrane Filtration Methods	Standard Total Coliform Membrane Filter Procedure	Standard Methods 9222 B, C (20 th ed.; 21 st ed.) ^{2, 4} Standard Methods Online 9222 B-97 ^{2, 4} , 9222 C-97 ^{2, 4}
		Membrane Filtration using MI medium	EPA Method 1604 ²
		m-ColiBlue24® Test ^{2, 4}	
		Chromocult ^{2, 4}	
	Enzyme Substrate Methods	Colilert®	Standard Methods 9223 B (20 th ed.; 21 st ed.) ^{2, 5} Standard Methods Online 9223 B-97 ^{2, 5}

APPENDIX K - ANALYTICAL METHODS FOR CONDUCTING TOTAL COLIFORM AND E. COLI ANALYSES
(HAR §11-20-9.1(b))

Organism	Methodology Category	Method ¹	Citation ¹
		Colisure®	Standard Methods 9223 B (20 th ed.; 21 st ed.) ^{2, 5, 6} Standard Methods Online 9223 B-97 ^{2, 5, 6}
		E*Colite® Test ²	
		Readycult® Test ²	
		modified Colitag® Test ²	
<i>Escherichia coli</i>			
	<i>Escherichia coli</i> Procedure (following Lactose Fermentation Methods)	EC-MUG medium	Standard Methods 9221 F.1 (20 th ed.; 21 st ed.) ²
	<i>Escherichia coli</i> Partition Method	EC broth with MUG (EC-MUG)	Standard Methods 9222 G.1c(2) (20 th ed.; 21 st ed.) ^{2, 8}
		NA-MUG medium	Standard Methods 9222 G.1c(1) (20 th ed.; 21 st ed.) ²
	Membrane Filtration Methods	Membrane Filtration using MI medium	EPA Method 1604 ²
		m-ColiBlue24® Test ^{2, 4}	
		Chromocult ^{2, 4}	

APPENDIX K - ANALYTICAL METHODS FOR CONDUCTING TOTAL COLIFORM AND E. COLI ANALYSES
(HAR §11-20-9.1(b))

Organism	Methodology Category	Method ¹	Citation ¹
	Enzyme Substrate Methods	Colilert®	Standard Methods 9223 B (20 th ed.; 21 st ed.) ^{2, 5} Standard Methods Online 9223 B-97 ^{2, 5, 6}
		Colisure®	Standard Methods 9223 B (20 th ed.; 21 st ed.) ^{2, 5, 6} Standard Methods Online 9223 B-97 ^{2, 5, 6}
		E*Colite® Test ²	
		Readycult® Test ²	
		modified Colitag® Test ²	

(a) Footnotes to Appendix K

¹ The procedures must be done in accordance with the documents listed in subsection (b) of this Appendix. For Standard Methods, either editions, 20th (1998) or 21st (2005), may be used. For the Standard Methods Online, the year in which each method was approved by the Standard Methods Committee is designated by the last two digits following the hyphen in the method number. The methods listed are the only online versions that may be used. For vendor methods, the date of the method listed in subsection (b) of this Appendix is the date/version of the approved method. The methods listed are the only versions that may be used for compliance with this rule. Laboratories should be careful to use only the approved versions of the methods, as product package inserts may not be the same as the approved versions of the methods.

² Incorporated by reference. See subsection (b) of this Appendix.

³ Lactose broth, as commercially available, may be used in lieu of lauryl tryptose broth, if the system conducts at least 25 parallel tests between lactose broth and lauryl tryptose broth using the water normally tested, and if the findings from this comparison demonstrate that the false-positive rate and false-negative rate for total coliforms, using lactose broth, is less than 10 percent.

APPENDIX K - ANALYTICAL METHODS FOR CONDUCTING TOTAL COLIFORM AND E. COLI ANALYSES
(HAR 11-20-9.1(b))

⁴ All filtration series must begin with membrane filtration equipment that has been sterilized by autoclaving. Exposure of filtration equipment to UV light is not adequate to ensure sterilization. Subsequent to the initial autoclaving, exposure of the filtration equipment to UV light may be used to sanitize the funnels between filtrations within a filtration series. Alternatively, membrane filtration equipment that is pre-sterilized by the manufacturer (i.e., disposable funnel units) may be used.

⁵ Multiple-tube and multi-well enumerative formats for this method are approved for use in presence-absence determination under this regulation.

⁶ Colisure® results may be read after an incubation time of 24 hours.

⁷ A multiple tube enumerative format, as described in *Standard Methods for the Examination of Water and Wastewater* 9221, is approved for this method for use in presence-absence determination under this regulation.

⁸ The following changes must be made to the EC broth with MUG (EC-MUG) formulation: Potassium dihydrogen phosphate, KH_2PO_4 , must be 1.5g, and 4-methylumbelliferyl-Beta-D-glucuronide must be 0.05 g.

b) Incorporation by reference. The standards required in §11-20-9.1 are incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, EPA must publish notice of change in the *Federal Register* and the material must be available to the public. All approved material is available for inspection either electronically at www.regulations.gov, in hard copy at the Water Docket, or from the sources indicated below. The Docket ID is EPA-HQ-OW-2008-0878. Hard copies of these documents may be viewed at the Water Docket in the EPA Docket Center, (EPA/DC) EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 1-202-566-1744, and the telephone number for the Water Docket is 1-202-566-2426. Copyrighted materials are only available for viewing in hard copy. These documents are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 1-202-741-6030 or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(1) American Public Health Association, 800 I Street, NW, Washington, DC 20001

(i) "Standard Methods for the Examination of Water and Wastewater," 20th edition (1998):

APPENDIX K - ANALYTICAL METHODS FOR CONDUCTING TOTAL COLIFORM AND E. COLI ANALYSES
(HAR 11-20-9.1(b))

- (A) Standard Methods 9221, "Multiple-Tube Fermentation Technique for Members of the Coliform Group," B.1, B.2, "Standard Total Coliform Fermentation Technique."
- (B) Standard Methods 9221, "Multiple-Tube Fermentation Technique for Members of the Coliform Group," D.1, D.2, "Presence-Absence (P-A) Coliform Test."
- (C) Standard Methods 9222, "Membrane Filter Technique for Members of the Coliform Group," B, "Standard Total Coliform Membrane Filter Procedure."
- (D) Standard Methods 9222, "Membrane Filter Technique for Members of the Coliform Group," C, "Delayed-Incubation Total Coliform Procedure."
- (E) Standard Methods 9223, "Enzyme Substrate Coliform Test," B, "Enzyme Substrate Test," Colilert® and Colisure®.
- (F) Standard Methods 9221, "Multiple Tube Fermentation Technique for Members of the Coliform Group," F.1, "*Escherichia coli* Procedure: EC-MUG medium."
- (G) Standard Methods 9222, "Membrane Filter Technique for Members of the Coliform Group," G.1.c(2), "*Escherichia coli* Partition Method: EC broth with MUG (EC-MUG)."
- (H) Standard Methods 9222, "Membrane Filter Technique for Members of the Coliform Group," G.1.c(1), "*Escherichia coli* Partition Method: NA-MUG medium."
- (ii) "Standard Methods for the Examination of Water and Wastewater," 21st edition (2005):
 - (A) Standard Methods 9221, "Multiple-Tube Fermentation Technique for Members of the Coliform Group," B.1, B.2, "Standard Total Coliform Fermentation Technique."
 - (B) Standard Methods 9221, "Multiple-Tube Fermentation Technique for Members of the Coliform Group," D.1, D.2, "Presence-Absence (P-A) Coliform Test."
 - (C) Standard Methods 9222, "Membrane Filter Technique for Members of the Coliform Group," B, "Standard Total Coliform Membrane Filter Procedure."
 - (D) Standard Methods 9222, "Membrane Filter Technique for Members of the Coliform Group," C, "Delayed-Incubation Total Coliform Procedure."
 - (E) Standard Methods 9223, "Enzyme Substrate Coliform Test," B, "Enzyme Substrate Test," Colilert® and Colisure®.
 - (F) Standard Methods 9221, "Multiple Tube Fermentation Technique for Members of the Coliform Group," F.1, "*Escherichia coli* Procedure: EC-MUG medium."
 - (G) Standard Methods 9222, "Membrane Filter Technique for Members of the Coliform Group," G.1.c(2), "*Escherichia coli* Partition Method: EC broth with MUG (EC-MUG)."
 - (H) Standard Methods 9222, "Membrane Filter Technique for Members of the Coliform Group," G.1.c(1), "*Escherichia coli* Partition Method: NA-MUG medium."
- (iii) "Standard Methods Online" available at <http://www.standardmethods.org>:
 - (A) Standard Methods Online 9221, "Multiple-Tube Fermentation Technique for Members of the Coliform Group" (1999), B.1, B.2-99, "Standard Total Coliform Fermentation Technique."
 - (B) Standard Methods Online 9221, "Multiple-Tube Fermentation Technique for Members of the Coliform Group" (1999), D.1, D.2-99, "Presence-Absence (P-A) Coliform Test."

APPENDIX K - ANALYTICAL METHODS FOR CONDUCTING TOTAL COLIFORM AND E. COLI ANALYSES
(HAR 11-20-9.1(b))

- (C) Standard Methods Online 9222, "Membrane Filter Technique for Members of the Coliform Group" (1997), B-97, "Standard Total Coliform Membrane Filter Procedure."
 - (D) Standard Methods Online 9222, "Membrane Filter Technique for Members of the Coliform Group" (1997), C-97, "Delayed-Incubation Total Coliform Procedure."
 - (E) Standard Methods Online 9223, "Enzyme Substrate Coliform Test" (1997), B-97, "Enzyme Substrate Test", Colilert® and Colisure®.
- (2) Charm Sciences, Inc., 659 Andover Street, Lawrence, MA 01843-1032, telephone 1-800-343-2170:
 - (i) *Colite® - "Charm E*Colite™ Presence/Absence Test for Detection and Identification of Coliform Bacteria and *Escherichia coli* in Drinking Water," January 9, 1998.
 - (ii) [Reserved]
 - (3) CPI International, Inc., 5580 Skylane Blvd., Santa Rosa, CA, 95403, telephone 1-800-878-7654:
 - (i) modified Colitag®, ATP D05-0035 - "Modified Colitag™ Test Method for the Simultaneous Detection of *E. coli* and other Total Coliforms in Water," August 28, 2009.
 - (ii) [Reserved]
 - (4) EMD Millipore (a division of Merck KGaA, Darmstadt Germany), 290 Concord Road, Billerica, MA 01821, telephone 1-800-645-5476:
 - (i) Chromocult - "Chromocult® Coliform Agar Presence/Absence Membrane Filter Test Method for Detection and Identification of Coliform Bacteria and *Escherichia coli* for Finished Waters," November 2000, Version 1.0.
 - (ii) Readycult® - "Readycult® Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and *Escherichia coli* in Finished Waters," January 2007, Version 1.1.
 - (5) EPA's Water Resource Center (MC-4100T), 1200 Pennsylvania Avenue, NW, Washington, DC 20460, telephone 1-202-566-1729:
 - (i) EPA Method 1604, EPA 821-R-02-024 - "EPA Method 1604: Total Coliforms and *Escherichia coli* in Water by Membrane Filtration Using a Simultaneous Detection Technique (MI Medium)," September 2002, <http://www.epa.gov/nerlcwww/1604sp02.pdf>.
 - (ii) [Reserved]
 - (6) Hach Company, P.O. Box 389, Loveland, CO 80539, telephone 1-800-604-3493:
 - (i) m-ColiBlue24® - "Membrane Filtration Method m-ColiBlue24® Broth," Revision 2, August 17, 1999.
 - (ii) [Reserved]