

APPENDIX A

Specific Violations and Other Situations Requiring Public Notice

This appendix details the specific drinking water Violation Type(s) and the associated Public Notice Tier(s)

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Specific Violations and Other Situations Requiring PN

Contaminant	MCL/MRDL/TT ¹ Violations: Tier of Public Notice Required	Monitoring and Testing Procedure Violations: Tier of Public Notice Required
Microbiological Contaminants		
Total coliform	2	3
Fecal coliform/ <i>E. coli</i>	1	1, 3 ²
Turbidity MCL	2	3
Turbidity MCL (average of 2 days samples >5 NTU)	2, 1 ³	3
Turbidity (for TT violations resulting from a single exceedance of maximum allowable turbidity level)	2, 1 ⁴	3
Surface Water Treatment Rule violations, other than violations resulting from single exceedance of maximum allowable turbidity level (TT)	2	3
Interim Enhanced Surface Water Treatment Rule violations, other than violations resulting from single exceedance of maximum turbidity level (TT) ⁵	2	3
Inorganic Chemicals (IOCs)		
Antimony	2	3
Arsenic	2	3
Asbestos (fibers >10 µm)	2	3
Barium	2	3
Beryllium	2	3
Cadmium	2	3
Chromium (total)	2	3
Cyanide	2	3
Fluoride	2	3
Mercury (inorganic)	2	3
Nitrate	1	1, 3 ⁶
Nitrite	1	1, 3 ⁶
Total Nitrate and Nitrite	1	3
Selenium	2	3
Thallium	2	3

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Contaminant	MCL/MRDL/TT ¹ Violations: Tier of Public Notice Required	Monitoring and Testing Procedure Violations: Tier of Public Notice Required
Lead and Copper Rule (Action Level for lead is 0.015 mg/L, for copper is 1.3 mg/L)		
Lead and Copper Rule (TT)	2	3
Synthetic Organic Chemicals (SOCs)		
2,4-D	2	3
2,4,5-TP (Silvex)	2	3
Alachlor	2	3
Atrazine	2	3
Benzo(a)pyrene (PAHs)	2	3
Carbofuran	2	3
Chlordane	2	3
Dalapon	2	3
Di (2-ethylhexyl) adipate	2	3
Di (2-ethylhexyl) phthalate	2	3
Dibromochloropropane	2	3
Dinoseb	2	3
Dioxin (2,3,7,8-TCDD)	2	3
Diquat	2	3
Endothall	2	3
Endrin	2	3
Ethylene dibromide	2	3
Glyphosate	2	3
Heptachlor	2	3
Heptachlor epoxide	2	3
Hexachlorobenzene	2	3
Hexachlorocyclopentadiene	2	3
Lindane	2	3
Methoxychlor	2	3
Oxamyl (Vydate)	2	3
Pentachlorophenol	2	3
Picloram	2	3
Polychlorinated biphenyls (PCBs)	2	3
Simazine	2	3
Toxaphene	2	3

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Contaminant	MCL/MRDL/TT ¹ Violations:	Monitoring and Testing Procedure Violations:
	Tier of Public Notice Required	Tier of Public Notice Required
Volatile Organic Chemicals (SOCs)		
Benzene	2	3
Carbon tetrachloride	2	3
Chlorobenzene (monochlorobenzene)	2	3
<i>o</i> -Dichlorobenzene	2	3
<i>p</i> -Dichlorobenzene	2	3
1,2-Dichloroethane	2	3
1,1-Dichloroethylene	2	3
<i>cis</i> -1,2-Dichloroethylene	2	3
<i>trans</i> -1,2-Dichloroethylene	2	3
Dichloromethane	2	3
1,2-Dichloropropane	2	3
Ethylbenzene	2	3
Styrene	2	3
Tetrachloroethylene	2	3
Toluene	2	3
1,2,4-Trichlorobenzene	2	3
1,1,1-Trichloroethane	2	3
1,1,2-Trichloroethane	2	3
Trichloroethylene	2	3
Vinyl chloride	2	3
Xylenes (total)	2	3
Radioactive Contaminants		
Beta/photon emitters	2	3
Alpha emitters (gross alpha)	2	3
Combined radium (226 and 228)	2	3
<p>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). USEPA set standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAAs).⁷</p>		
Total trihalomethanes (TTHMs)	2	3
Haloacetic Acids (HAAs)	2	3
Bromate	2	3
Chlorite	2	3

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Contaminant	MCL/MRDL/TT ¹ Violations:	Monitoring and Testing Procedure Violations:
	Tier of Public Notice Required	Tier of Public Notice Required
Chlorine (MRDL)	2	3
Chloramine (MRDL)	2	3
Chlorine dioxide (MRDL), where any 2 consecutive daily samples at entrance to distribution system only are above MRDL	2	2 ⁸ , 3
Chlorine dioxide (MRDL), where sample(s) in distribution system the next day are also above MRDL	1 ⁹	1
Control of DBP precursors--TOC (TT)	2	3
Bench marking and disinfection profiling	N/A	3
Development of monitoring plan	N/A	3
Other Treatment Techniques		
Acrylamide (TT)	2	N/A
Epichlorohydrin (TT)	2	N/A
Unregulated contaminants¹⁰	N/A	3
Nickel	N/A	3
Operation under a variance or exemption	3	N/A
Violation of conditions of a variance or exemption	2	N/A
Fluoride secondary maximum contaminant level (SMCL) exceedance	3	N/A
Exceedance of nitrate MCL for non-community systems, as allowed by primacy agency	1	N/A
Availability of unregulated contaminant monitoring data	3	N/A
Waterborne disease outbreak	1	N/A
Other waterborne emergency¹¹	1	N/A

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Appendix A Footnotes

¹MCL - Maximum contaminant level, MRDL - Maximum residual disinfectant level, TT - Treatment technique

²Failure 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.

³Systems that violate the turbidity MCL of 5 NTU based on an average of measurements over two consecutive days must contact and discuss the problem and proposed solution with the Illinois EPA Regional Field Operations Staff within 24 hours after learning of the violation. Based on this consultation, the Illinois EPA may subsequently decide to elevate the violation to Tier 1. **If a water supply is unable to make contact with the EPA Regional Field Operations staff in the 24-hour period, the violation is automatically elevated to Tier 1.**

⁴Systems with treatment technique violations involving a *single* exceedance of a maximum turbidity limit under the Surface Water Treatment Rule (SWTR) or the Interim Enhanced Surface Water Treatment Rule (IESWTR) are required to contact and discuss the problem and proposed solution with the Illinois EPA Regional Field Operations Staff within 24 hours after learning of the violation. Based on this consultation, the Illinois EPA may subsequently decide to elevate the violation to Tier 1. **If a system is unable to make contact with the Illinois EPA Regional Field Operations staff in the 24-hour period, the violation is automatically elevated to Tier 1.**

⁵Most of the requirements of the Interim Enhanced Surface Water Treatment Rule become effective January 1, 2002 for surface water systems and ground water systems under the direct influence of surface water serving at least 10,000 persons. 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 may in some cases require that new compliance actions be taken.

⁶Failure 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.

⁷Surface public water supplies and ground public water supplies under the influence of surface water serving 10,000 or greater must comply with new DBP MCLs, disinfectant MRDLs, and related monitoring requirements beginning January 1, 2002. All other public water supplies must meet the MCLs and MRDLs beginning January 1, 2004. Surface public water supplies and ground public water supplies under the influence of surface water, 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. ⁷Surface public water supplies and ground public water supplies under the influence of surface water, 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.

⁸Failure 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.

⁹If 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.

¹⁰Some water systems must monitor for certain unregulated contaminants.

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¹¹Other waterborne emergencies require a Tier 1 public notice for situations that do not meet the definition of a waterborne disease outbreak : “the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a public water system (PWS) that is deficient in treatment, as determined by the appropriate local or State agency” but 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.

