2012 Annual Compliance Report

of

Public Water System Violations

in

The State of Maine

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2012 Annual Compliance Report

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I. Overview

The Maine Drinking Water Program: An Overview

The Environmental Protection Agency (EPA) established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA and the 1986 Amendments, EPA set national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCL) and Maximum Disinfectant Residual Levels (MRDL). For some regulations, EPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of contaminants in water.

The agency also regulates how often public water systems (PWS) monitor their water for contaminants and report the monitoring results to the states or EPA. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M/R) requirements. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development.

PWS are required to notify the public when they have violated these regulations. The 1996 Amendments to the SDWA require public notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, and steps that the PWS is undertaking to correct the violation and possibility of alternative water supplies during the violation.

The SDWA allows states and territories to seek EPA approval to administer their own PWSS Programs. The authority to run a PWSS Program is called primacy. For a state to receive primacy, EPA must determine that the state meets certain requirements laid out in the SDWA and the regulations, including the adoption of drinking water regulations that are at least as stringent as the Federal regulations and a demonstration that they can enforce the program requirements.

The 1986 SDWA Amendments gave Indian Tribes the right to apply for and receive primacy. EPA currently administers PWSS Programs on all Indian lands except the Navajo Nation, which was granted primacy in late 2000.

Annual State PWS Report

Each quarter, primacy states submit data to the Safe Drinking Water Information System (SDWIS/FED), an automated database maintained by EPA. The data include, but are not limited to PWS inventory information, the incidence of Maximum Contaminant Level, Maximum Residual Disinfectant Level, monitoring, treatment technique violations, and information on enforcement activity related to those violations. Section 1414(c)(3) of the Safe Drinking Water Act requires states to provide EPA with an annual report of violations of the primary drinking water standards. This report provides the numbers of violations in each of six categories: MCL, MRDL, treatment techniques, variances and exemptions,

significant monitoring violations, and significant consumer notification violations. Data retrieved from SDWIS/FED form the basis of this report.

Public Water System

A public water system (PWS) is defined as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are three types of PWS. PWS can be community (such as towns), non-transient non-community (such as schools or factories), or transient non-community systems (such as rest stops or parks). For this report, when the acronym "PWS" is used, it means systems of all types, unless specified in greater detail.

Maximum Contaminant Level

Under the SDWA, the EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCL).

Maximum Residual Disinfection Level

The EPA sets national limits on residual disinfectant levels in drinking water to reduce the risk of exposure to disinfectant byproducts formed when public water systems add chemical disinfectant for either primary or residual treatment. These limits are known as Maximum Residual Disinfection Levels (MRDL).

Treatment Techniques

For some regulations, the EPA establishes treatment techniques (TT) in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, bacteria, and turbidity.

Variances and Exemptions

A primacy state can grant a PWS a variance from a primary drinking water regulation if the characteristics of the raw water sources reasonably available to the PWS do not allow the system to meet the MCL. To obtain a variance, the system must agree to install the best available technology, treatment techniques, or other means of limiting drinking water contamination that the EPA Administrator finds are available (taking costs into account), and the state must find that the variance will not result in an unreasonable risk to public health. A variance must be reviewed not less than every 5 years to determine if the PWS remains eligible.

A state with primacy can grant an exemption temporarily relieving a PWS of its obligation to comply with an MCL, treatment technique, or both if the system's noncompliance results from compelling factors (which may include economic factors) and the system was in

operation on the effective date of the MCL or treatment technique requirement. The state will require the PWS to comply with the MCL or treatment technique as expeditiously as practicable, but not later than 3 years after the otherwise applicable compliance date.

Monitoring

A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL. If a PWS fails to have its water tested as required or fails to report test results correctly to the primacy agent, a monitoring violation occurs.

Significant Monitoring Violations

For this report, significant monitoring violations are generally defined as any major monitoring violation that occurred during the calendar year of the report. A major monitoring violation, with rare exceptions, occurs when no samples were taken or no results were reported during a compliance period.

Consumer Notification

Every Community Water System is required to deliver to its customers a brief annual water quality report. This report is to include some educational material, and will provide information on the source water, the level of any detected contaminants, and compliance with drinking water regulations.

Significant Consumer Notification Violations

For this report, a significant public notification violation occurred if a community water system completely failed to provide its customers the required annual water quality report.

II. Calendar Year 2012 Narrative Summary of Violations

During discussions, in 2008, with EPA Region 1 and other New England States, the Maine Drinking Water Program has learned that other states do not increase sampling beyond federal requirements. Example: Maine routinely requires transient water systems (TNCWS's) to collect monthly bacteria samples or may require monthly/quarterly nitrate samples because of septic system set-back issues. Maine may also require TNCWS's to conduct quarterly monitoring for VOC's. Maine requires all community and non-transient non-community water systems (NTNCWS's) to monitor for Radon, Radionuclides and Fluoride during new well approval. Maine has ordered NTNC's to install radionuclide and fluoride removal treatment and to conduct routine monitoring to insure the equipment is operating properly. Failure to monitor and MCL violations for these cases may have been given a federal violation code instead of a state violation code. When looking at the detailed report, look at the type of system and keep in mind the federal rules may not apply to that particular type of system or that the State of Maine is more stringent in an effort to protect public health. The Maine Drinking Water Program is continuing to review these violations and changing them over to state violations when appropriate.

1. Total Coliform (Bacteria) Rule

There were **174** Maximum Contaminant Level violations incurred among **128** PWS, and **726** Failure to Monitor/Report violations incurred among **414** PWS.

2. Volatile Organic Contaminants (VOC) (Phase II/V Rule)

There were no Maximum Contaminant Level violations. There were **8** Failure to Monitor/Report violations incurred among **8** PWS. It should be noted that one Failure to Monitor/Report violation covers all of the 21 regulated VOC because all the VOC are included in one sample. If a violation had been issued for each regulated VOC not tested for in 2012, the total number of violations would have been **168**.

3. Synthetic Organic Contaminants (Phase II/V Rule)

There were no MCL violations. There were **12** Monitoring/Reporting violations among **5** systems for the synthetic organic contaminants (SOC) group test.

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4. Inorganic Contaminants (IOC) (Phase II/V Rule)

There were **20** Maximum Contaminant Level violations for the Phase II/V rule, incurred by **8** PWS. **All were Arsenic MCLs.**

There were **113** Nitrate and **9** Nitrite Failure to Monitor/Report violations incurred for annual, quarterly, or monthly monitoring periods. There were **9** Arsenic Failure to Monitor/Reporting violations among **5** systems. There were **3** Failure to Monitor/Report violations among **3** systems for the inorganic chemical (IOC) group test.

5. Lead and Copper Rule

There was **1** Treatment Technique violation for the Lead and Copper Rule. There were **28** Failure to Monitor/Report violations incurred among **27** PWS.

6. Radionuclides Rule

There were **8** Maximum Contaminant Level violations among **3** systems and **24** Failure to Monitor/Report violations incurred by **20** systems for the Radionuclides Rule.

7. Surface Water Treatment Rule

There were **9** SWTR Treatment Technique violations (41) among **3** systems. There was **1** Turbidity Exceedance violation (44). There were no Failure to Monitor/Report violations for the Surface Water Treatment Rule.

8. Interim Enhanced Surface Water Treatment Rule

There were no violations.

9. Stage 1 Disinfectants / Disinfection By-Products Rule

There were **22** Maximum Contaminant Level violations incurred among **6** PWS. There were **8** Failure to Monitor/Report violations among **8** PWS.

10. Consumer Confidence Rule

There were **8** significant Consumer Notification violations incurred by **8** PWS.

11. Filter Backwash Recycle Rule

There were no violations.

12. Long Term 1 Enhanced Surface Water Treatment Rule

There were no violations.

13. Groundwater Rule

There were **8** Groundwater Rule Monitoring Violations incurred by **8** systems.
In 2012, Maine had **1** transient groundwater system in which E. coli was found in the well. The system did install chlorination to meet 4-log inactivation.

14. Public Notification Rule

Maine has always required systems to notify the public for MCL violations and Failure to Monitor Violations. Resolving the PN requirement in the violations was not always performed correctly in SDWIS which led to unresolved violations and additional PNR violations being created. In 2011 EPA allowed states to resolve these historical outstanding PN violations. This allowed Maine to clean up past unresolved violations and set us up to begin running the PN Rule on a regular basis. In February 2012, Maine ran the Public Notification Rule for the first time since 2003 for past years violations. Since February 2012, we have been running the Public Notification on a regular schedule. **There were 125 Public Notification Rule violations incurred by 99 systems during 2012.**

III. Summary of Violations by Rule

(Maine Summary Data Report)

IV. General PWS Inventory Information

Tabulation of Public Water Systems in Maine by Type and Total Population Served as of December 31, 2012.

PWS Type	Number of Active Systems	Population Served
Community	376	666,183
Non-Transient, Non-Community	356	64,396
Transient, Non-Community	1130	181,676
Total Regulated	**1862**	**912,255**

V. Detailed List of all Violations issued in 2012

(Maine Detail Data report)