



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
OFFICE OF DRINKING WATER

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July 17, 2018

Dear Ms. Chandler:

Enclosed is our *2017 Violations of National Primary Drinking Water Regulations in Washington State* annual report. This report summarizes water quality, monitoring, or reporting violations that occurred in Washington State last year. We reported these violations of national primary drinking water regulations to the EPA electronically on a quarterly basis, as they occurred.

If you have questions about this report, please call me at 360-236-3110, or Jacqui Brown Miller, Statewide Compliance and Enforcement Coordinator, at 360-236-3112.

Sincerely,

Mike Means

Director

Enclosure

CC: Marie Jennings, EPA Region 10
Clark Halvorson, Department of Health

2017 Violations of National Primary Drinking Water Regulations in Washington State

Washington's Annual Compliance Report to the U.S. Environmental
Protection Agency for Reporting Year 2017



Washington State Department of Health

Office of Drinking Water

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Introduction

About this Report and Enforcement in Washington State

The Washington State Department of Health Office of Drinking Water prepared this report to comply with the requirements of the federal Safe Drinking Water Act. This report provides information relating to violations of federal primary drinking water regulations by Washington's public water systems in the previous calendar year.

Each quarter we submit data to the Safe Drinking Water Information System (SDWIS/FED), an automated database the U.S. Environmental Protection Agency (EPA) maintains. We based this annual compliance report to EPA on data retrieved by us from EPA, which was based on our quarterly reporting. This data has not been re-validated since first submitted to EPA. To review any particular water system's compliance record, please visit this web site:

<http://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/DrinkingWaterSystemData/SentryInternet>.

Our mission is to protect the health of the citizens of Washington State by ensuring safe and reliable drinking water. We accomplish our mission by helping communities address the drinking water challenges they face now and in the future. We provide education and technical assistance to water systems, and use appropriate enforcement tools when they are out of compliance with safe drinking water requirements. While we are concerned about any drinking water violation, we prioritize and focus our compliance efforts on the highest public health risks, consistent with EPA's Enforcement Response Policy.

Federal regulations define a *public water system* (PWS) as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or an average of at least 25 people for at least 60 days each year. In Washington, we call these systems "Group A public water systems."

There are three types of Group A systems, which are defined in Attachment A, Report Terms Defined:

- Community (such as a city, town, or homeowners association)
- Non-transient non-community (such as schools or businesses)

- Transient non-community (such as rest stops or parks).

Federal and State Drinking Water Programs: An Overview

The 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 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 (MCLs) and the Maximum Residual Disinfectant Levels (MRDLs) for disinfection byproducts. 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 PWSs 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 requirements. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development. Finally, EPA requires PWSs to notify their consumers when they have violated these regulations. The 1996 Amendments to the SDWA require consumer notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies during the violation.

The SDWA applies to the 50 states, the District of Columbia, Indian Lands, Puerto Rico, the Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

The SDWA allows states, tribes 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 federal 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. Of the 56 states and territories, all but Wyoming and the District of Columbia have primacy. The EPA regional offices administer the PWSS programs within these two jurisdictions.

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 agencies submit data to the SDWIS/FED, an automated database maintained by EPA. The data submitted include, but are not limited to, PWS inventory information, the incidence of Maximum Contaminant Level, Maximum Residual Disinfectant Level, monitoring, and treatment technique violations; and information on enforcement activity related to these 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: MCLs, MRDLs, treatment techniques, variances and exemptions, significant monitoring violations, and significant consumer notification violations. The EPA regional offices report the information for Wyoming, the District of Columbia, and all Indian lands but the Navajo Nation. EPA Regional offices also report federal enforcement actions taken. Data retrieved from SDWIS/FED form the basis of this report.

Detail of Violations Reported to EPA

2017 Violations				
Violation Category	Rule Group	Rule Name	Number of Viols	Number of Systems with Violation Type
Maximum Contaminant Level Violation	Chemicals	Arsenic	4	2
Maximum Contaminant Level Violation	Chemicals	Nitrates	54	27
Maximum Contaminant Level Violation	Microbials	Revised Total Coliform Rule	8	8
Maximum Contaminant Level Violation	subtotal		66	37
Monitoring Violation	Microbials	Revised Total Coliform Rule	531	386
Monitoring Violation	subtotal		531	386
Monitoring and Reporting	Chemicals	Arsenic	14	10
Monitoring and Reporting	Chemicals	Inorganic Chemicals	1	1
Monitoring and Reporting	Chemicals	Lead and Copper Rule	82	72
Monitoring and Reporting	Chemicals	Nitrates	254	227
Monitoring and Reporting	Chemicals	Synthetic Organic Chemicals	30	3
Monitoring and Reporting	Chemicals	Volatile Organic Chemicals	320	13
Monitoring and Reporting	Microbials	Surface Water Treatment Rule	8	5
Monitoring and Reporting	subtotal		709	331
Other Violation	Other	Consumer Confidence Rule	345	320
Other Violation	subtotal		345	320
Treatment Technique Violation	Microbials	Revised Total Coliform Rule	11	10
Treatment Technique Violation	Microbials	Surface Water Treatment Rule	47	18
Treatment Technique Violation	subtotal		58	28
	total		1709	1102

Information is based on violations reported by Washington to EPA as they occur and then reported back to Washington by EPA annually.

Obtaining a Copy of this Report

This report can be found online at:

<http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/Enforcement/EPAViolationReports.aspx>.

You can also request a copy at:

Department of Health
Office of Drinking Water
P.O. Box 47822
Olympia, Washington 98504-7822
1-800-521-0323

Attachments

- Attachment A: Key Terms and Abbreviations in Report and Attachments

Attachment A: Report Terms Defined

Key Terms in Report and Attachments

Public Water System

A Public Water System 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. This includes any collection, treatment, storage, or distribution facilities under control of the purveyor and used primarily in connection with the system. This definition excludes a system serving only one single-family residence and a system with four or fewer connections all of which serve residences on the same farm.

There are three types of PWSs. PWSs can be community systems (such as towns), non-transient non-community systems (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.

Group A water system:

A public water system serving 15 or more connections or 25 or more people per day for 60 or more days per year and subject to the federal Safe Drinking Water Act.

Community Water System (CWS):

A Group A system with 15 or more service connections used by residents for 180 or more days within a calendar year regardless of the number of people, or regularly serving 25 or more residents for 180 or more days within the calendar year regardless of the number of service connections.

Non-community Water System:

A Group A system serving 25 or more nonresidents per day for 60 or more days per year, or 15 or more connections, or 25 or more residents between 60 and 180 days per year.

Non-transient Non-community (NTNC) Water System (NTNCWS):

A Group A non-community system serving 25 or more of the same nonresidents per day for 180 days or more per year.

Transient Non-community (TNC) Water System:

A Group A non-community system that serves 15 or more connections in use less than 180 days per year, or 25 or more different nonresidents for 60 or more days per year, or 25 or more of the same nonresidents for 60 to 180 days per year, or 25 or more residents for 60 to 180 days per year.

Group B Water System:

A public water system that serves fewer than 15 connections and fewer than 25 people for 60 or more days per year, or fewer than 15 connections and any number of people for less than 60 days per year.

Note: This report doesn't include Group B systems. They are subject to Washington State Board of Health requirements, but not federal requirements.

Maximum Contaminant Level

Under the Safe Drinking Water Act (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 (MCLs).

Maximum Residual Disinfectant Level

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

Treatment Techniques

For some regulations, the EPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, some 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 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. The variance shall be reviewed not less than every 5 years to determine if the system remains eligible for the variance.

A primacy state can grant an exemption temporarily relieving a PWS of its obligation to comply with an MCL or 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.

Washington State currently has issued no variances or exemptions.

Monitoring

A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL or MRDL. 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 significant monitoring violation that occurred during the calendar year of the report. A significant 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 levels of any detected contaminants, and compliance with drinking water regulations. For this report, a significant consumer notification violation occurred if a community water system completely failed to provide its customers the required annual water quality report.

Public Notice Violations

The Public Notification Rule requires all PWS to notify their consumers any time a PWS violated a national primary drinking water regulation or has a situation posing a risk to public health. Notices must be provided to persons served (not just billing consumers).