

2021 Violations of National Primary Drinking Water Regulations in Washington State

**Washington's Annual Public Water Systems (PWS)
Compliance Report to the U.S. Environmental Protection
Agency for Reporting Year 2021**



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Introduction

About this Report and Enforcement in Washington State

The Washington State Department of Health Office of Drinking Water (ODW) prepared this report to comply with 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 base this annual compliance report on data extracted from the EPA's Safe Drinking Water Act (SDWA) Enforcement Targeting Tool (ETT). We base this data on our quarterly reporting; it has not been re-validated. To review information about Washington public water systems, visit our [Sentry Internet](#).

ODW's mission: We work with others to protect the health of the people of Washington 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 water systems are out of compliance with drinking water regulations. While we are concerned about all drinking water violations, 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 25 people or more 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 (city, town, or homeowners' association).
- ◆ Non-transient non-community (schools or businesses).
- ◆ Transient non-community (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 and 1996 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 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. EPA bases sample monitoring requirements and frequency on population served, source susceptibility, and previous sample results. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development. PWSs must notify their consumers when they have violated the SDWA regulations. Consumer notification must include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps customers may take, steps that the PWS is undertaking to correct the violation, when these steps are expected to be completed, and if they need to use an alternative water supply.

The SDWA applies to all 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 SDWA requirements and federal regulations, including the adoption of drinking water regulations that are at least as stringent as 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 jurisdictions.

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 includes, but is not limited to, PWS inventory information, the incidence of primary Maximum Contaminant Level (MCL), Maximum Residual Disinfectant Level (MRDL), 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 and variance and exemptions in each of the following categories: primary MCLs, MRDLs, treatment techniques, significant monitoring violations, and significant consumer notification violations.

Detail of Violations Reported to EPA

2021 Violations					
Violation Category	Rule Group	Rule Name	# of Viols	# of Resolved Viols	# of PWS in Viols
Maximum Contaminant Level Violation	Chemicals	Arsenic	8	4	5
Maximum Contaminant Level Violation	Chemicals	Nitrates	15	8	11
Maximum Contaminant Level Violation	Disinfectants and Disinfection Byproducts Rule	Stage 2 Disinfectants and Disinfection Byproducts Rule	34	1	10
Maximum Contaminant Level Violation	Microbials	Revised Total Coliform Rule	7	5	7
Maximum Contaminant Level Violations	subtotal		64	18	33
Monitoring Violation	Microbials	Revised Total Coliform Rule	570	501	369
Monitoring and Reporting Violation	Chemicals	Arsenic	27	15	15

Monitoring and Reporting Violation	Chemicals	Inorganic Chemicals	16	6	11
Monitoring and Reporting Violation	Chemicals	Lead and Copper Rule	263	20	207
Monitoring and Reporting Violation	Chemicals	Nitrates	322	36	276
Monitoring and Reporting Violation	Chemicals	Synthetic Organic Chemicals	984	300	23
Monitoring and Reporting Violation	Chemicals	Volatile Organic Chemicals	1300	440	32
Monitoring and Reporting Violation	Disinfectants and Disinfection Byproducts Rule	Stage 2 Disinfectants and Disinfection Byproducts Rule	133	21	64
Monitoring and Reporting Violation	Microbials	Surface Water Treatment Rule	18	18	11
Monitoring Violations and Monitoring and Reporting Violations	subtotal		3633	1357	1008
Other Violation	Other	Consumer Confidence Rule	162	139	159
Other Violations	subtotal		162	139	159

Treatment Technique Violation	Chemicals	Lead and Copper Rule	6	2	4
Treatment Technique Violation	Microbials	Ground Water Rule	26	24	7
Treatment Technique Violation	Microbials	Long Term 1 Enhanced Surface Water Treatment Rule	3	2	1
Treatment Technique Violation	Microbials	Revised Total Coliform Rule	2	0	2
Treatment Technique Violation	Microbials	Surface Water Treatment Rule	13	9	9
Treatment Technique Violations	subtotal		50	37	23

Information is based on violations reported by Washington to EPA as they occur and then reported back to Washington by EPA annually, except for Monitoring and Reporting for Microbials under the Revised Total Coliform Rule, which is from our own database.

Obtaining a Copy of this Report

This report can be found on our [EPA Violation Reports webpage](#).

A copy of the report can also be obtained by contacting:

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

Attachment

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 (PWS) is defined by 40 CFR § 141.2 as “a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such terms include: any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any “special irrigation district.” A public water system is either a “community water system” or a “noncommunity water system.”

There are three types of PWSs: community, non-transient non-community, or transient non-community systems. 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 (MCL)

Under the Safe Drinking Water Act (SDWA), the EPA sets national limits on contaminant levels in drinking water. Primary MCLs are based on chronic, non-

acute, and acute human health effects. Secondary MCLs are based on factors other than health effects.

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.

Variations 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 five 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 agency, a monitoring and reporting violation occurs.

Significant Monitoring Violations

For this report, a significant monitoring violation occurs when no samples were taken, or no results were reported for an entire compliance period. If a system does not monitor the quality of its water, it is impossible for consumers and primacy agencies to know whether the water being served is meeting health-based standards.

Consumer Notification

Every community water system is required to deliver annually to its customers a consumer confidence report briefly describing the system's water quality. This report includes educational material, information on the source water, water treatment provided, the levels of any detected contaminants, and compliance with drinking water regulations. Failure to provide this report is a significant consumer notification violation.

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).

