

**ANNUAL COMPLIANCE REPORT**  
**SOUTH DAKOTA PUBLIC WATER SYSTEM VIOLATIONS**  
for the period  
January - December 2023

## **INTRODUCTION**

This annual Compliance Report has been developed to meet the requirements of section 1414 of the 1996 Amendments to the Safe Drinking Water Act. The period covered in this report is January 1, 2023, through December 31, 2023. A copy of this report is being made available to the public.

### **Protecting Drinking Water in South Dakota**

The U.S. Environmental Protection Agency (EPA) established a public drinking water system program under the authority of the 1974 Safe Drinking Water Act. The Safe Drinking Water Act allows States to seek EPA approval to administer their own public drinking water program. The authority to run a public drinking water system program is called primacy, a short term for primary enforcement responsibility. To receive primacy, States must meet certain requirements, including the adoption of drinking water regulations that are at least as stringent as the federal regulations and a demonstration that the State can enforce the program requirements. South Dakota met the requirements and was granted primacy by EPA in 1984.

Under the Safe Drinking Water Act and the 1986 Amendments to the Safe Drinking Water Act, both the state and EPA set limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as drinking water standards. For some regulations, a treatment technique is established in place of a drinking water standard to control unacceptable levels of contaminants in drinking water. The State and EPA also regulate how often public water systems monitor their water for contaminants. Generally, the larger the population served by a drinking water system, the more frequent the monitoring and reporting requirements. In addition to monitoring for regulated contaminants, public water systems are also required to monitor for unregulated contaminants to provide data for future regulatory development. Finally, the State and EPA require public water systems to notify their consumers when they have a violation of the regulations. The 1996 Amendments to the Safe Drinking Water Act require that public notifications include a clear and understandable explanation of the nature of the violation. The public notice must also specify any potential adverse health effects, steps the public water system has taken or will be taking to correct the violation, and alternative water sources available during the violation.

## Glossary of Terms

**Filtered Systems:** Water systems that have installed filtration treatment.

**Inorganic Chemicals (IOCs):** Non-carbon based compounds such as metals, nitrate, and asbestos. These contaminants are naturally occurring in some water, but can get into water through chemical manufacturing, farming, and other man-made pollution sources.

**Lead and Copper Rule:** This rule established national limits on lead and copper in drinking water. Lead and copper corrosion poses various health risks when ingested at any level and can enter drinking water from household pipes and plumbing fixtures.

**Initial lead and copper tap M/R (monitoring/reporting):** A violation where a system did not meet initial lead and copper testing requirements or failed to report the results of those tests to the state.

**Follow-up or routine lead and copper tap M/R:** A violation where a system did not meet follow-up or routine lead and copper tap testing requirements or failed to report the results.

**Treatment installation:** Violations for failing to install optimal corrosion control treatment or source water treatment which would reduce lead and copper levels in water at the tap.

**Public Education:** A violation where a system did not provide required public education about reducing or avoiding lead intake from water.

**Monitoring:** EPA and the State specify what tests a water system must collect samples for and the frequency of that sample collection. A water system that does not collect the proper types of samples or does not follow the frequency schedule is in violation.

**Organic Contaminants:** Carbon-based compounds, such as industrial solvents and pesticides. This category includes both synthetic organic chemicals (SOCs) and volatile organic chemicals (VOCs). The contaminants generally get into water by discharge from factories and runoff from cropland.

**Radionuclides:** Radioactive particles that can occur naturally in water or result from man-made pollution sources.

**Surface Water Treatment Rule and Interim Enhanced Surface Water Treatment Rule:** These rules establish criteria under which water systems supplied by surface water, or ground water under the direct influence of surface water, must filter and disinfect their water. Violations of these rules are reported for the following four categories:

**Monitoring, routine/repeat (for filtered systems):** A violation for failing to carry out required tests or reporting the results of the tests.

**Treatment Techniques (for filtered systems):** A violation for failing to properly treat its water.

**Monitoring, routine/repeat (for unfiltered systems):** A violation for failing to carry out required water tests or reporting the results of those tests.

**Failure to filter (for unfiltered systems):** A violation for failing to properly treat its water.

**Revised Total Coliform Rule:** This rule establishes regulations for microbiological contaminants in drinking water. These contaminants can cause immediate risks to health. If no samples are collected during the one-month compliance period, a significant monitoring violation occurs.

**Acute MCL (maximum contaminant level) violation:** A violation where the system found fecal coliform or E. coli, potentially harmful bacteria, in its water, thereby a violation the rule.

**Non-acute MCL violation:** A violation where the system found total coliform bacteria in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, if more than 5% of the samples are positive for total coliform there is a violation.

**Major routine and follow-up monitoring:** A violation where a system did not perform any monitoring.

**Treatment Techniques:** A treatment process that leads to a reduction in the level of a contaminant sufficient to meet drinking water standards. For purposes of this report, treatment techniques are specified for the Surface Water Treatment Rule and Interim Enhanced Surface Water Treatment Rule to reduce or remove contaminants that cannot be feasibly or economically measured in a laboratory and for the Lead and Copper Rule to remove or reduce the corrosivity of the drinking water.

**Unfiltered Systems:** Water systems that do not need to filter their water before disinfecting it because the source is very clean.

**Violation:** A failure to meet any state or federal drinking water regulation.

**Sanitary Survey:** A sanitary survey is a regulatory on-site inspection of the water sources, facilities, equipment, operation and maintenance, and monitory compliance of a public water system for the purpose of evaluating the adequacy of the components for producing and distributing safe drinking water. Sanitary Surveys are required every 3 years for Community Water Systems and 5 years for Non-Community Water Systems. Each primacy agency (EPA, state, territory, or tribe) is responsible for implementing a Sanitary Survey Program.

## The Drinking Water Program: An Overview

### Annual State PWS Report

South Dakota submits data to EPA on a quarterly basis. Data submitted includes public water system inventory statistics, drinking water standards violations, major monitoring/reporting violations, treatment technique violations, and enforcement actions taken against violators. The annual compliance report that South Dakota is required to submit to EPA will provide a total annual representation of the numbers of violations for: a) drinking water standards, b) treatment techniques, c) variances and exemptions, and d) significant monitoring violations. The information in attached compliance report tables is based on data retrieved from EPA and verified against the state's database.

### Public Water System

A public water system is defined as a water system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of 25 people for at least 60 days each year. There are three types of public water systems:

***Community Water System (CWS):*** A public water system that supplies water to the same population year-round (towns, housing developments, rural water systems).

***Non-Transient Non-Community Water System (NTNC):*** A public water system that regularly supplies water to at least 25 of the same people at least six months per year. Some examples are schools, factories, office buildings, and hospitals which have their own water systems (schools, day care centers, factories).

***Transient Non-Community Water System (TNC):*** A public water system that provides water in a place such as a gas station or campground where people do not remain for long periods of time (rest stops, parks, or campgrounds).

In South Dakota there are 462 water systems classified as Community Water Systems, 16 are classified as Non-Transient Non-Community Water Systems, and 177 are classified as Transient Non-Community Water Systems for a total of 655.

### Drinking Water Standard

Under the Safe Drinking Water Act, the State and EPA set limits on the highest amount of contaminant that is allowed in drinking water to ensure that the water is safe for human consumption. These limits are known as drinking water standards.

### Treatment Techniques

For some regulations, treatment techniques are established in place of a drinking water standard to control unacceptable levels of certain contaminants. For example, treatment techniques have been established to control viruses, bacteria, and turbidity (cloudiness) in drinking water.

## **Monitoring and Reporting**

A public water system is required to monitor and verify that the levels of contaminants present in the drinking water do not exceed the drinking water standard. If a public water system fails to have its drinking water tested as required or fails to report test results to the state, a monitoring violation occurs.

### **Significant Monitoring and Reporting Violations**

For this report, significant monitoring violations are defined as any major monitoring violation that has occurred during the calendar year of the report. A major monitoring violation (except for the surface water treatment rule) occurs when samples are not taken, or results are not reported during a compliance period. A major surface water treatment rule monitoring/reporting violation occurs when fewer than 10% of the required samples are taken, or results are not reported during a reporting interval. A minor violation occurs when some, but not all, of the required numbers of samples are taken.

## **Consumer Notification**

Every community public water system is required to prepare and provide to its customers a brief annual water quality report, also called the Consumer Confidence 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.

### **Significant Consumer Notification Violations**

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

## **Public Notification Violations**

The Public Notification Rule requires a public water system to notify their customers any time a public water system has violated a national primary drinking water regulation or has a situation posing a risk to public health. The period a public water system must provide notification to the public depends upon the risk posed by the violation or situation. Notices must be provided to person served (not just billing customers).

### **Significant Public Notification Violations**

For this report, significant public notification violation occurs when a public water system completely fails to notify its customers that the public water system violated a national primary drinking water regulation or had a situation posing a risk to public health.

## Compliance Report Tables

**Table 1** provides a summary of the types of violations under the Safe Drinking Water Act, the number of systems in violation, along with the percentage of systems in compliance with specific rules and regulations under the Safe Drinking Water Act.

**Table 2** provides a listing of each contaminant regulated under the Safe Drinking Water Act with the corresponding number of drinking water standards, treatment techniques, and significant monitoring violations, along with the number of water systems incurring violations for each contaminant.

**Table 3** provides an additional summary of the types of violations under the Safe Drinking Water Act along with the summary of the total violations, number of drinking water systems in violation, and the total population affected.

One of the annual compliance report categories, which is required to be reported, is any variances and exemptions. However, no data is provided for this category because no variances or exemptions have been issued in South Dakota.

## Summary of Table Information

The overall quality of drinking water available to South Dakota public water system consumers remains good. Most of the violations incurred by drinking water systems are typically monitoring and reporting violations.

Beginning in 2002 all Community, Non-Transient Non-Community, and Transient Non-Community public water systems were required to have a certified operator. We expect this requirement to improve the compliance levels as operators of small systems come to better understand the monitoring and reporting requirements through required attendance at operator training.

## OBTAINING A COPY OF THE 2023 PUBLIC WATER SYSTEMS REPORT

As required by the Safe Drinking Water Act the State of South Dakota has made the 2023 Public Water System Report available to the public. Interested individuals can obtain a copy of the 2023 Annual Public Water Systems Report for South Dakota by accessing:

State Website: <https://danr.sd.gov/OfficeOfWater/DrinkingWater/RegulatoryInfo/default.aspx>

Telephone: (605) 773-3754

Email: [sddrinkingwater@state.sd.us](mailto:sddrinkingwater@state.sd.us)

Address of Responsible State Department: Drinking Water Program 523 E. Capitol Pierre SD 57501

Contact Name: Mark McIntire – Drinking Water Program Administrator

**State: South Dakota**  
**Reporting Interval: CY 2023**

**Table 1**

Date-May 28, 2024	Drinking Water Standards			Treatment Techniques			Monitoring		
	Total Number of Systems Required to Monitor	Total Number of Systems in Violation	Percentage of Systems with No Violations	Total Number of Systems Required to Monitor	Total Number of Systems in Violation	Percentage of Systems with No Violations	Total Number of Systems Required to Monitor	Total Number of Systems in Violation	Percentage of Systems with No Violations
<b><i>Volatile Organic Chemicals (VOCs)</i></b>									
Community Water Systems	278	0	100.00%				278	1	99.64%
Transient Noncommunity Water Systems									
Nontransient Noncommunity Water Systems	16	0	100.00%				16	0	100.00%
<b><i>Synthetic Organic Chemicals (SOCs)</i></b>									
Community Water Systems	278	0	100.00%	27	0	100.00%	278	1	99.64%
Transient Noncommunity Water Systems									
Nontransient Noncommunity Water Systems	16	0	100.00%				16	0	100.00%
<b><i>Inorganic Chemical (IOCs)</i></b>									
Community Water Systems	278	1	99.64%				278	0	100.00%
Transient Noncommunity Water Systems	177	0	100.00%				177	1	99.44%
Nontransient Noncommunity Water Systems	16	0	100.00%				16	0	100.00%
<b><i>Radionuclides</i></b>									
Community Water Systems	278	1	99.64%				278	0	100.00%
Transient Noncommunity Water Systems									
Nontransient Noncommunity Water Systems									
<b><i>Revised Total Coliform Rule</i></b>									
Community Water Systems	462	1	99.78%	462	0	100.00%	462	22	95.24%
Transient Noncommunity Water Systems	177	1	99.44%	177	0	100.00%	177	18	89.83%
Nontransient Noncommunity Water Systems	16	0	100.00%	16	0	100.00%	16	0	100.00%
<b><i>Surface Water Treatment Rule</i></b>									
Community Water Systems				140	2	98.57%	19	0	100.00%
Transient Noncommunity Water Systems									
Nontransient Noncommunity Water Systems									
<b><i>Lead and Copper Rule</i></b>									
Community Water Systems				462	0	100.00%	462	15	96.75%
Transient Noncommunity Water Systems									
Nontransient Noncommunity Water Systems				16	0	100.00%	16	0	100.00%
<b><i>Disinfection By-Products</i></b>									
Community Water Systems	407	0	100.00%	407	28	93.12%	407	18	95.58%
Transient Noncommunity Water Systems									
Nontransient Noncommunity Water Systems	13	0	100.00%	13	0	100.00%	13	0	100.00%
<b><i>Groundwater Rule</i></b>									
Community Water Systems				323	1	99.69%	323	2	99.38%
Transient Noncommunity Water Systems				177	2	98.87%	177	1	99.44%
Nontransient Noncommunity Water Systems				16	0	100.00%	16	2	87.50%

**Table 1 - Continued**

	Reporting Violations			"Other" Violations				
	Total Number of Systems Required to Comply	Total Number of Systems in Violation	Percentage of Systems with No Violations	Total Number of Systems Required to Comply	Total Number of Systems in Violation	Percentage of Systems with No Violations		
<b><i>Public Notification</i></b>								
Community Water Systems				462	1	99.78%		
Transient Noncommunity Water Systems				177	15	91.53%		
Nontransient Noncommunity Water Systems				16	0	100.00%		
<b><i>Consumer Confidence Reports</i></b>								
Community Water Systems				462	5	98.92%		
Transient Noncommunity Water Systems								
Nontransient Noncommunity Water Systems								
<b><i>Groundwater Rule</i></b>								
Community Water Systems				323	2	99.38%		
Transient Noncommunity Water Systems				177	0	100.00%		
Nontransient Noncommunity Water Systems				16	0	100.00%		
<b><i>Revised Total Coliform Rule</i></b>								
Community Water Systems			462	0	100.00%	462	0	100.00%
Transient Noncommunity Water Systems			177	2	98.87%	177	0	100.00%
Nontransient Noncommunity Water Systems			16	0	100.00%	16	0	100.00%



**Table 2**

**State: South Dakota**  
**Reporting Interval: CY 2023**

Date-May 28, 2024	Drinking Water Standard (mg/l)	Drinking Water Standards		Treatment Techniques		Monitoring	
		Number of Violations	Number of Systems w/ Violations	Number of Violations	Number of Systems w/ Violations	Number of Violations	Number of Systems w/ Violations
<b><i>Volatile Organic Chemicals (VOCs)</i></b>							
Vinyl Chloride	0.002	0	0			1	1
Benzene	0.005	0	0			1	1
Carbon Tetrachloride	0.005	0	0			1	1
1,2-Dichloroethane	0.005	0	0			1	1
Trichloroethylene	0.005	0	0			1	1
p-Dichlorobenzene	0.075	0	0			1	1
1,1-Dichloroethylene	0.007	0	0			1	1
1,1,1-Trichloroethane	0.2	0	0			1	1
cis-1,2-Dichloroethylene	0.07	0	0			1	1
1,2-Dichloropropane	0.005	0	0			1	1
Ethylbenzene	0.7	0	0			1	1
Monochlorobenzene (Chlorobenzene)	0.1	0	0			1	1
o-Dichlorobenzene	0.6	0	0			1	1
Styrene	0.1	0	0			1	1
Tetrachloroethylene	0.005	0	0			1	1
Toluene	1	0	0			1	1
Trans-1,2-Dichloroethylene	0.1	0	0			1	1
Xylenes, Total	10	0	0			1	1
Dichloromethane (Methylene Chloride)	0.005	0	0			1	1
1,2,4-Trichlorobenzene	0.07	0	0			1	1
1,1,2-Trichloroethane	0.005	0	0			1	1
<b><i>Subtotal</i></b>		<b><i>0</i></b>	<b><i>0</i></b>			<b><i>21</i></b>	<b><i>1</i></b>

Table 2 - Continued

<i>Synthetic Organic Chemicals</i>							
Alachlor (Lasso)	0.002	0	0			1	1
Atrazine	0.003	0	0			1	1
Carbofuran	0.04	0	0			1	1
Chlordane	0.002	0	0			1	1
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0	0			1	1
2,4-D	0.07	0	0			1	1
Ethylene Dibromide (EDB)	0.00005	0	0			1	1
Heptachlor	0.0004	0	0			1	1
Heptachlor epoxide	0.0002	0	0			1	1
Lindane	0.0002	0	0			1	1
Methoxychlor	0.04	0	0			1	1
Total Polychlorinated Biphenyls (PCBs)	0.0005	0	0			1	1
Pentachlorophenol	0.001	0	0			1	1
Toxaphene	0.003	0	0			1	1
2,4,5-TP (Silvex)	0.05	0	0			1	1
Benzo (A) Pyrene	0.0002	0	0			1	1
Dalapon	0.2	0	0			1	1
Di (2-Ethylhexyl) adipate	0.4	0	0			1	1
Di (2-Ethylhexyl) phthalate	0.006	0	0			1	1
Dinoseb	0.007	0	0			1	1
Diquat	0.02	0	0			1	1
2,3,7,8-TCDD (Dioxin)	$3 \times 10^{-8}$	0	0			0	0
Endothall	0.1	0	0			1	1
Endrin	0.002	0	0			1	1
Glyphosate	0.7	0	0			1	1
Hexachlorobenzene (HCB)	0.001	0	0			1	1
Hexachlorocyclopentadiene	0.05	0	0			1	1
Oxamyl (Vydate)	0.2	0	0			1	1
Picloram	0.5	0	0			1	1
Simazine	0.004	0	0			1	1
Acrylamide				0	0		
Epichlorohydrin				0	0		
<i>Subtotal</i>		0	0	0	0	29	1

**Table 2 - Continued**

<i>Inorganic Chemical (IOCs)</i>							
Antimony	0.006	0	0			0	0
Arsenic	0.010	0	0			0	0
Barium	2	0	0			0	0
Beryllium	0.004	0	0			0	0
Cadmium	0.005	0	0			0	0
Chromium	0.1	0	0			0	0
Fluoride	4	0	0			0	0
Mercury	0.002	0	0			0	0
Nickel	NA					0	0
Nitrate	10	3	1			1	1
Nitrite	1	0	0			1	1
Selenium	0.05	0	0			0	0
Thallium	0.002	0	0			0	0
Cyanide	0.2	0	0			0	0
Asbestos (fibers 10 µm long)	7 million fibers/L	0	0			0	0
<i>Subtotal</i>		3	1			2	1

<i>Radionuclides</i>							
Gross alpha	15 pCi/L	0	0			0	0
Combined Radium 226 / Radium 228	5 pCi/L	0	0			0	0
Uranium	.030	1	1			0	0
Gross beta	4 mrem/yr	0	0			0	0
<i>Subtotal</i>		1	1			0	0

<i>Revised Total Coliform Rule</i>							
E. coli MCL	Presence	2	2	0	0		
Major routine monitoring						56	40
<i>Subtotal</i>		2	2	0	0	56	40

<i>SWTR/IESWTR/LT1/LT2</i>							
Monitoring-Turbidity, etc.						0	0
Treatment Techniques				2	2		
<i>Subtotal</i>				2	2	0	0

**Table 2 - Continued**

<i>Lead and Copper Rule</i>							
Initial/Follow-up tap samples						16	16
OCCT				0	0		
Public Education				0	0		
<i>Subtotal</i>				0	0	16	16

<i>Disinfection By-Products</i>							
THMs/HAA5s/Chlorite/MRDLs	80 ug/l/60 ug/l	0	0	0	0	18	9
Chlorine Residuals/IDSE's	4	0	0			30	26
Precursors/Operator Certification	NA			15	15	0	0
<i>Subtotal</i>		0	0	15	15	48	26

<i>Groundwater Rule</i>							
Groundwater Rule				3	3	5	5

	Reporting		"Other" Violations	
	Number of Violations	Number of Systems w/ Violations	Number of Violations	Number of Systems w/ Violations
<i>Consumer Confidence Reports</i>				
Failure to submit report			6	5

<i>Public Notification</i>							
Failure to submit report						37	15

<i>Groundwater Rule</i>							
Failure to consult/notify/survey						2	2

<i>Revised Total Coliform Rule</i>							
No sample site plan/record/survey						0	0
Failure to report various items				0	0		

**Table 3**

**State: South Dakota**

**Reporting Interval: CY 2023**

Date-May 28, 2024	Drinking Water Standards		Treatment Techniques		Monitoring		"Other" \
	Number of Violations	Number of Systems w/ Violations	Number of Violations	Number of Systems w/ Violations	Number of Violations	Number of Systems w/ Violations	Number of Violations
<b>Chemical Rules</b>							
Volatile Organic Chemicals (VOCs)	0	0			21	1	
Synthetic Organic Chemicals (SOCs)	0	0	0	0	29	1	
Inorganic Chemicals (IOCs)	3	1			2	2	
Radiological Chemicals (Rads)	1	1			0	0	
<b>Chemical Rules</b>	4	3	0	0	52	1	
<b>Revised Total Coliform Rule</b>	2	2	0	0	56	40	0
<b>SWTR/IESWTR/LT1/LT2</b>			2	2	0	0	
<b>Lead/Copper Rule (LCR)</b>			0	0	15	15	
<b>Consumer Confidence (CCR)</b>							6
<b>Public Notification (PN)</b>							37
<b>Disinfection By-Products (DBP)</b>	0	0	15	15	48	26	
<b>Groundwater Rule (GWR)</b>			3	3	5	5	2
<b>Totals</b>	6	4	20	20	176	72	45

	Reporting	
	Violations	Systems w/
<b>Revised Total Coliform Rule</b>	0	0

	Number of Violations	Systems w/ Violations	Population Affected
<b>All Violations</b>	176	105	29117

# SUMMARY OF ACTIVE SOUTH DAKOTA PUBLIC WATER SYSTEMS

05/07/2024

Number of Public Water Systems (PWS)	655
Number of Community PWS	462
Number of Non-Transient Non-Community Systems	16
Number of Transient Non-Community Systems	177

Number of Rural Water Systems	47
Number of Municipal Water Systems	221
Number of Mobile Home Courts	31
Number of Housing Developments	160
Number of State/Federal Facilities	3

<b>Community Water Systems</b>	
Surface Water	16
Ground Water	238
Combined Surface/Ground Water	1
GWUDISW	3
Served by Surface Water System	118
Served by Ground Water System	85
Served by Purchased GWUDISW	0

## Non-Community/NTNC System Sources

Surface Water	2
Ground Water	191
Combined Surface/Ground Water	0
GWUDISW	0
Served by Surface Water System	0
Served by Ground Water System	0

<b>Lead/Copper Population Groups</b>	
Population > 100,000	1
Population 10,001 to 100,000	16
Population 3,301 to 10,000	29
Population 501 to 3,300	109
Population 101 to 500	191
Population < 101	132

## Community / NTNC

Systems with own sources	278
Systems served by other PWS	200

Community PWS Microbiological Population	840,361
Non-Community PWS Microbiological Population	29,936
NTNC Microbiological Population	8,036

Municipal/RWS Population	798,792
HD/TC/Colonies/State/Federal	41,569

Population served by Ground Water/Purchased GW	345,819
Population served by Surface Water/Purchased SW	193,823
Population served by Combined Surface/Ground Water	28,495
Population served by GWUDISW/Purchased GWI	73,700

<b>NC/NTNC Systems Open by Month</b>	
January	81
February	81
March	83
April	91
May	158
June	189

## NC/NTNC Systems Open by Month

July	189
August	187
September	178
October	113
November	85
December	80