

# **SUMMARY OF ANNUAL DRINKING WATER COMPLIANCE REPORT FOR 2000**

prepared by the

Drinking Water Program  
Municipal Facilities Division  
Environmental Health Section  
North Dakota Department of Health

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## **INTRODUCTION**

The Federal Safe Drinking Water Act (SDWA) was significantly amended in 1996. The amended SDWA contains many new provisions, several of which are intended to improve consumer awareness on drinking water compliance issues. One such provision requires states to prepare and submit to the U.S. Environmental Protection Agency (EPA) an annual report on public water system (PWS) violations within their state. The EPA, in turn, is required to summarize the states' reports in an annual national report and make the report available to the public.

This report represents a summary of the full 2000 report provided to the EPA to satisfy the requirement. Please note that there are only minor differences between this summary report and the full report. The full report describes all other SDWA contaminants for which there were no violations incurred by North Dakota PWSs (including associated definitions). Otherwise, the reports are identical.

### **Public Water System**

A 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 PWSs. PWSs can be community (such as towns), nontransient noncommunity (such as schools or factories), or transient noncommunity systems (such as rest stops or parks). For this report, when the acronym "PWS" is used, it means systems of all types unless specified otherwise.

In North Dakota in 2000, 320 systems were classified as Community Water Systems (CWSs), 33 as Nontransient Noncommunity Water Systems (NTNCWSs), and 209 as Transient Noncommunity Water Systems (TNCWSs) for a total of 562 PWSs.

### **2000 SDWA Violations**

The following tables depict SDWA violations incurred by North Dakota PWSs in calendar year 2000 and include: unresolved violations (from previous calendar years); and, violations that cross calendar year 2000 (i.e., violations determined in 2001 based on 2000 monitoring data). There were a total of 199 violations and 121 systems in violation in North Dakota for 2000.

**State:** North Dakota

**Reporting Interval:**

January 2000 - December 2000

	MCL (mg/L) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
<b>INORGANIC CONTAMINANTS</b>							
Arsenic	0.05	2	2				
Selenium	0.05	1	1				
Total nitrate and nitrite	10 (as Nitrogen)	1	1			2	2
<b>Subtotal</b>		4	4			2	2
<b>TOTAL COLIFORM RULE</b>							
Acute MCL violation	Presence	1	1				
Non-acute MCL violation	Presence	55	33				
Major routine and follow up monitoring						102	72
<b>Subtotal</b>		56	33			102	72
Minor routine and follow up monitoring						25	22
<b>NOTE: EPA does not require minor monitoring violations to be counted for the ACR.</b>							

**State:** North Dakota

**Reporting Interval:**

January 2000 - December 2000

	MCL (mg/L) <sup>1</sup>	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
<b>SURFACE WATER TREATMENT RULE</b>							
Filtered systems							
Monitoring, routine/repeat						1	1
Treatment techniques				1	1		
<b>Subtotal</b>				1	1	1	1
<b>LEAD AND COPPER RULE</b>							
Initial lead and copper tap M/R						1	1
Follow-up or routine lead and copper tap M/R						5	5
<b>Subtotal</b>						6	6
<b>CONSUMER CONFIDENCE REPORT RULE</b>							
CCR Report violation						2	2
<b>Subtotal</b>						2	2

1. Values are in milligrams per liter (mg/L), unless otherwise specified.

## **Definitions for Summary of Violations Table**

The following definitions apply to the Summary of Violations Table.

**Consumer Confidence Report (CCR) Rule:** The CCR Rule requires all community water systems to issue annual drinking water quality reports to their customers. States are to report two categories of violations:

*CCR Report Violation:* A violation that exists when a PWS fails to produce and deliver the report to the public and provide a copy to the State by the annual due date or the State determines the report was grossly inadequate and must be regenerated and delivered providing a copy to the State.

*CCR Adequacy/Availability/Content Violation:* A violation where the State determines the report is deficient in language, content, and/or meeting availability requirements.

**Filtered Systems:** Water systems that have installed filtration treatment [40 CFR 141, Subpart H].

**Inorganic Contaminants:** Non-carbon-based compounds such as metals, nitrates, and asbestos. These contaminants are naturally-occurring in some water, but can get into water through farming, chemical manufacturing, and other human activities. EPA has established MCLs for 15 inorganic contaminants [40 CFR 141.62].

**Lead and Copper Rule:** This rule established national limits on lead and copper in drinking water [40 CFR 141.80-91]. Lead and copper corrosion pose various health risks when ingested at any level, and can enter drinking water from household pipes and plumbing fixtures. States report violations of the Lead and Copper Rule in the following six categories:

*Initial lead and copper tap M/R:* 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 a failure to install optimal corrosion control treatment or source water treatment which would reduce lead and copper levels in water at the tap. [One number is to be reported for the sum of violations in both categories].

*Lead service line replacement:* A violation for a system's failure to replace lead service lines on the schedule required by the regulation.

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

**Maximum Contaminant Level (MCL):** The highest amount of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. MCLs are defined in milligrams per liter (parts per million) unless otherwise specified.

**Monitoring:** EPA specifies which water testing methods the water systems must use, and sets schedules for the frequency of testing. A water system that does not follow EPA's schedule or methodology is in violation [40 CFR 141].

States must report monitoring violations that are significant as determined by the EPA Administrator and in consultation with the States. For purposes of this report, significant monitoring violations are major violations and they occur when no samples are taken or no results are reported during a compliance period. A major monitoring violation for the surface water treatment rule occurs when at least 90% of the required samples are not taken or results are not reported during the compliance period.

**Organic Contaminants:** Carbon-based compounds, such as industrial solvents and pesticides. These contaminants generally get into water through runoff from cropland or discharge from factories. EPA has set legal limits on 54 organic contaminants that are to be reported [40 CFR 141.61].

**Reporting Interval:** The reporting interval for violations to be included in the Annual Compliance Report, which is to be submitted to EPA by July 1, 2001, is from January 1, 2000 through December 31, 2000.

**Surface Water Treatment Rule:** The Surface Water Treatment Rule establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water [40 CFR 141, Subpart H]. Violations of the Surface Water Treatment Rule are to be reported for the following four categories:

*Monitoring, routine/repeat (for filtered systems):* A violation for a system's failure to carry out required tests, or to report the results of those tests.

*Treatment techniques (for filtered systems):* A violation for a system's failure to properly treat its water.

*Monitoring, routine/repeat (for unfiltered systems):* A violation for a system's failure to carry out required water tests, or to report the results of those tests.

*Failure to filter (for unfiltered systems):* A violation for system's failure to properly treat its water. Data for this violation code will be supplied to the States by EPA.

**Total Coliform Rule (TCR):** The Total Coliform Rule establishes regulations for microbiological contaminants in drinking water. These contaminants can cause short-term health problems. If no samples are collected during one month compliance period, a significant monitoring violation occurs. States are to report four categories of violations:

*Acute MCL violation:* A violation where the system found fecal coliform or E. coli, potentially harmful bacteria, in its water, thereby violating the rule.

*Non-acute MCL violation:* A violation where the system found total coliform 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, more than 5% of the samples positive for total coliform is a violation.

*Major routine and follow-up monitoring:* A violation where a system did not perform any monitoring. One number is reported for the sum of violations in these two categories.

*Sanitary Survey:* A major monitoring violation where a system fails to collect 5 routine monthly microbiological samples if a sanitary survey has not been performed during the previous 5 years.

**Treatment Techniques:** Treatment or other measures that EPA requires instead of an MCL for contaminants that laboratories cannot adequately measure. Failure to meet operational and system requirements under the Surface Water Treatment Rule, the Lead and Copper Rule, and the Phase II Rule (Acrylamide and Epichlorohydrin) have been included in this category of violation for the purposes of this report.

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

## **VARIANCES AND EXEMPTIONS**

North Dakota presently has no PWSs operating under a variance or exemption.

## **CONCLUSION**

The vast majority of PWSs in North Dakota maintain an excellent SDWA compliance record. Annually, approximately 400 Certificates of Compliance are issued to operators who maintain full compliance.

The following tables illustrate the high compliance rate (for calendar year 2000) maintained by North Dakota PWSs. It is the responsibility of each PWS under the SDWA to properly comply with all drinking water monitoring, reporting, MCL and treatment technique requirements.

Under the TCR, all PWSs are required to collect and submit a prescribed number of microbiological samples (based on population served) each month or quarter to a certified laboratory for analysis on an ongoing basis. Under the SWTR, PWSs that utilize surface water (currently 29 in North Dakota) are required to maintain finished water turbidity at or below certain target levels. Such systems are also required to maintain residual disinfectant concentrations at or above certain target levels (applies both to water entering and within the distribution system).

As it is nationwide, North Dakota's predominant compliance problem is ensuring that all required microbiological samples are collected. The department will continue to work with the PWSs in the state to improve compliance.

	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations
<b>Organic Contaminants</b>						
Community Water Systems (CWS)	320	100%	320	100%	320	100%
Nontransient Noncommunity Water Systems (NTNCWS)	33	100%			33	100%
Transient Noncommunity Water Systems (TNCWS)	0				0	
<b>Inorganic Contaminants</b>						
CWS	320	99.1%			320	100%
NTNCWS	33	100%			33	100%
TNCWS	209	99.5%			209	99.0%

	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations	Total Number of Systems Required to Monitor	Percentage of Systems with <u>No</u> Violations
<b>Radionuclides</b>						
CWS	320	100%			320	100%
NTNCWS	33	100%			33	100%
TNCWS	0				0	
<b>Total Coliform Rule</b>						
CWS	320	95.9%			320	89.4%
NTNCWS	33	87.9%			33	87.9%
TNCWS	209	92.3%			209	83.7%
<b>Surface Water Treatment Rule<sup>1</sup></b>						
CWS			19	94.7%	19	100%
NTNCWS			8	100%	8	87.5%
TNCWS			2	100%	2	100%
<b>Lead and Copper Rule</b>						
CWS			320	100%	320	98.4%
NTNCWS			33	100%	33	97.0%
TNCWS			0		0	
<b>Consumer Confidence Report Rule</b>						
CWS					320	99.4%
NTNCWS					0	
TNCWS					0	

1. Only those systems that use surface water are required to monitor under and comply with the SWTR.



# **LIST OF SYSTEMS WITH VIOLATIONS IN 2000<sup>1</sup>**

## **Inorganic Violations**

### **Community and Noncommunity Water Systems**

#### **Arsenic MCL Violation**

Galesburg - violation from previous calender years

Blending with water from Traill County Rural Water.

Returned to compliance 3/00.

Strasburg - violation from previous calender years

Drilling new well to blend in low arsenic water.

Returned to compliance 3/00.

#### **Selenium MCL Violation**

Steele - unresolved violation from previous calender year

Blending with other wells. Quarterly testing being done.

#### **Nitrate/Nitrite MCL Violation**

Towner State Nursery (McHenry County)

#### **Total Nitrate and Nitrite Failure to Monitor Violation**

Scruffy's Bar (Burleigh County)

Tioga Golf and Country Club (Williams County)

## **Microbiological Violations**

### **Community Water Systems**

#### **Acute Maximum Contaminant Level Violations (MCLA)**

none

#### **Maximum Contaminant Level Violations (MCL)**

Arthur

Battleground Addition -4 (Ward County)

Benedict-2

Berthold-3

Bowdon-2

Minot Mobile Estates (Ward County)

New Rockford

Newburg

Oriska

Rolette

Ross

Strasburg

Upper Souris WUA-System I (Ward County)

#### **Failure to Monitor Major and Follow-Up Monitoring Violations**

##### **(FMma and MaR)**

Almont-2

Barney

Battleground Addition-2 (Ward County)

Bowman

Braddock

Cathay

Chrisan Water Users Association (Cass County)

Columbus

Crary

Deering

Elliott-6

Finley

Forest River Colony-4 (Grand Forks County)

Fradets Orchard Water System (Cass County)

**Microbiological Violations**

**Community Water Systems**

**FMmi and MaR con't**

Havana-North System-2  
Havana-South System-2  
Lake Shure Home Owners Association-2 (Cass County)  
Lehr  
Litchville  
Meadowbrook Park Road & Water-5 (Cass County)  
Milton  
Monango  
New Salem  
Peaceful Valley-2 (Wells County)  
Plaza  
Portal  
Prairie Learning Center-3 (Grant County)  
Selfridge-3  
Selkirk Settlement (Cass County)  
Selz Water Users (Pierce County)  
Streeter  
University of Mary (Burleigh County)  
Verona  
Wimbledon

**Failure to Monitor Minor and Follow-Up Monitoring Violations**

**Community Water Systems (FMmi and MiR) continued:**

Oakes  
Robinson  
Sleepy Hollow Water Company (Cass County)  
Verona  
Wahpeton  
Watford City  
Woodworth

**Failure to Monitor Minor and Follow-Up Monitoring Violations**

**Community Water Systems (FMmi and MiR)** NOTE: EPA does not require minor monitoring violations to be counted for the ACR.

Battleground Addition-3 (Ward County)  
Berthold  
Flaxton  
Grafton  
Grand Forks Air Force Base (Grand Forks County)  
Havana-South System-2  
Kensal  
North Prairie RWU-System II (Ward County)

## **Microbiological Violations**

### **Noncommunity Water Systems**

#### **Acute Maximum Contaminant Level Violations (MCLA)**

Traynor Park (Mountrail County)

#### **Maximum Contaminant Level Violations (MCL)**

Alexander Water Spring (McKenzie County)

Brendles Bay Inc. (Mountrail County)

Crappie Creek Rec Area (Grant County)

Crossroads Café (Benson County)

Des Lacs NWR-3 (Ward County)

Fordville Public School-2 (Walsh County)

Granite Springs Water Co. (Ward County)

Indian Hills Resort-2 (McLean County)

Johnson Corners Christian Academy-7 (McKenzie County)

Knickerbocker Liquor Locker (Cass County)

Lamoure County Memorial Park (Lamoure County)

Long Lake NWR-3 (Burleigh County)

Minot Country Club (Ward County)

Park River Bible Camp (Walsh County)

PDQ Club (McKenzie County)

Tappen Public School (Kidder County)

The Lodge/The Nut Bar-3 (Barnes County)

Traynor Park (Mountrail County)

Twin Oaks Resort-2 (Bottineau County)

Watford City Golf Course (McKenzie County)

#### **Failure to Monitor Major and Follow-Up Monitoring Violations**

##### **(FMma and MaR)**

Ambrose Community Well (Divide County)

Arnegard Ballpark-2 (McKenzie County)

Arnegard Café-2 (McKenzie County)

Beulah Bay Rec Area (Mercer County)

Bottineau Winter Park Ski Area (Bottineau County)

Club 85 Bar (Billings County)

Contracting Unlimited (Stark County)

*system inactivated 7-00*

## **Microbiological Violations**

### **Noncommunity Water Systems**

#### **(FMma and MaR) con't:**

Crappie Creek Rec Area (Grant County)

Crossroads Restaurant-2 (Dunn County)

Deepwater Campground (McLean County)

Des Lacs NWR (Ward County)

Douglas Creek Rec Area (McLean County)

Downstream Campground (McLean County)

Doyle Memorial State Park (McIntosh County)

Driscoll Café (Burleigh County)

Driscoll Public School (Burleigh County)

Fordville Public School (Walsh County)

Fort Buford State Historic Site (Williams County)

Four Corners Café (Billings County)

Grandview Motel (Williams County)

Indian Hills Resort (McLean County)

Johnson Corners Christian Academy (McKenzie County)

Kelvin Clinic Bar (Rolette County)

KOA Campground (Ward County)

Lake Sakakawea State Park (Mercer County)

Lamoure County Memorial Park (Lamoure County)

Larry's Bar (Williams County)

Lidgerwood Park (Richland County)

Long X Saloon-4 (McKenzie County)

Rugby Eagles Aerie #3834 (Pierce County)

Sand Dune Saloon (Ransom County)

Sarles Bar (Cavalier County)

Superpumper (Ward County)

The Big D (Kidder County)

Tioga Golf and Country Club-2 (Williams County)

TJ's Bar & Lanes (Benson County)

Voyager Cove Camp-2 (Mercer County)

Waldo's Bar (Walsh County)

**Microbiological Violations**

**Noncommunity Water Systems**

**Failure to Monitor Minor and Follow-Up Monitoring Violations**

**(FMmi and MiR)** NOTE: EPA does not require minor monitoring violations to be counted for the ACR.

Fordville Public School (Walsh County)

Lake Tschida Residence (Grant County)

*system inactivated 9-00*

Lamoure County Memorial Park (Lamoure County)

Long Lake NWR (Burleigh County)

Minot Country Club (Ward County)

PDQ Club (McKenzie County)

Rick's Place (Pierce County)

**Surface Water Treatment Rule**

**Community and Noncommunity Water Systems**

**Treatment Technique Violations**

Valley City

**Failure to Monitor Violations/Report Violations**

Great River Energy (Mercer County)

**Lead and Copper Rule**

**Community and Nontransient Noncommunity Water Systems**

**Initial Tap Sampling for Lead and Copper**

**Failure to Monitor/Report Violations**

Peaceful Valley (Wells County)

**Follow-Up and Routine Tap sampling for Lead and Copper**

**Failure to Monitor/Report Violations**

Almont

Colony Park (Ward County)

Minot Mobile Estates (Ward County)

Sanborn

Border Central High School (Cavalier County)

**Consumer Confidence Report Rule**

**Community Water Systems**

**CCR Report Violations**

Colony Trailer Park (Ward County)

Returned to compliance 6/00.

Minot Mobile Estates (Ward County)

Returned to compliance 6/00.

1. Multiple violations within a specified category are represented by a number following the system name (i.e., "Bowdon-2" under Microbiological Violations, Community Water Systems, MCL Violations means Bowdon incurred 2 MCL violations during the reporting period).