

# **SUMMARY OF ANNUAL DRINKING WATER COMPLIANCE REPORT FOR 2002**

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 2002 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 2002, 319 systems were classified as Community Water Systems (CWSs), 28 as Nontransient Noncommunity Water Systems (NTNCWSs), and 187 as Transient Noncommunity Water Systems (TNCWSs) for a total of 534 PWSs.

### **2002 SDWA Violations**

The following tables depict SDWA violations incurred by North Dakota PWSs in calendar year 2002 and include: unresolved violations (from previous calendar years); and, violations that cross calendar year 2002 (i.e., violations determined in 2003 based on 2002 monitoring data). There were a total of 166 violations consisting of 111 major violations and 11 minor violations and 44 public notifications violations (40 PN violations for major violations and 2 PN violations for minor violations; and 2 violations for ongoing SMCL Fluoride violations). 83 out of 534 systems incurred these violations in North Dakota during 2002.

**State:** North Dakota

**Reporting Interval:**

January 2002 - December 2002

	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>							
Total nitrate and nitrite	10 (as Nitrogen)	1	1			2	2
<b>Subtotal</b>		1	1			2	2
<b>RADIONUCLIDES</b>							
Radium-226	5 pCi/L					1	1
<b>Subtotal</b>						1	1
<b>TOTAL COLIFORM RULE</b>							
Acute MCL violation	Presence	3	3				
Non-acute MCL violation	Presence	28	22				
Major routine and follow up monitoring						72	55
<b>Subtotal</b>		31	22			72	55
<p><b>Note:</b> Although a PWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So the sum of 'NUMBER OF PWS's IN VIOLATION', over the various violation types or contaminants, may not add up to the total.</p>							
Minor routine and follow up monitoring						8	8
<p><b>NOTE:</b> EPA does not require minor monitoring violations to be counted for the ACR.</p>							

**State:** North Dakota

**Reporting Interval:**

January 2002 - December 2002

	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>							
Monitoring routine/repeat						0	0
<b>Subtotal</b>						0	0
<b>Failure to Monitor Minor</b>  <b>NOTE: EPA does not require minor monitoring violations to be counted for the ACR</b>						1	1
<b>LEAD AND COPPER RULE</b>							
Initial Tap Sampling						1	1
Follow-up or routine lead and copper tap M/R						3	3
<b>Subtotal</b>						4	3

**NOTE: Although a PWS may be out of compliance with more than one contaminant or violation type, when calculating totals, it is counted no more than once within the population being totaled. So, the sum of 'NUMBER OF PWS's IN VIOLATION', over the various violation types or contaminants, may not add up to the total.**

**State:** North Dakota

**Reporting Interval:**

January 2002 - December 2002

	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>CONSUMER CONFIDENCE RULE</b>							
<b>CCR Adequacy/Availability/ Content Violation (Minor violation)</b>  <b>NOTE: EPA does not require reporting of minor violations of Adequacy/ Availability/ Content to be included in the ACR.</b>						2	2
<b>PUBLIC NOTIFICATION RULE</b>							
<b>Public Notice Violations</b>						40	31
<b>Subtotal</b>						40	31
<b>Public Notice Violations for Minor and/or On-going Violations</b>						4	4

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, or if a community public water system fails to submit a completed certification form..

**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].

**Public Notification Rule:** This rule requires a public water system to notify the public anytime the system violates national primary drinking water regulations or has other situations posing a risk to public health. Note: The State of North Dakota began issuing Code 75 Public Notice violations 10/01/2002. Prior to that date Code 06 violations were issued. Code 75 violations link the Public Notification Violation to a specific rule. Code 06 violations do not link the Public Notification Violation to a specific rule.

**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, 2003, is from January 1, 2002 through December 31, 2002.

**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 320 Certificates of Compliance are issued to operators who maintain full compliance.

The following tables illustrate the high compliance rate (for calendar year 2002) 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 28 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/Report	Percentage of Systems with <u>No</u> Violations
<b>Inorganic Contaminants</b>						
CWS	319	100%			319	100%
NTNCWS	28	100%			28	100%
TNCWS	187	100%			187	98.9%



	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/Report	Percentage of Systems with <u>No</u> Violations
<b>Radionuclides</b>						
CWS	319	100 %			319	99.7%
NTNCWS	0				0	
TNCWS	0				0	
<b>Total Coliform Rule</b>						
CWS	319	96.2%			319	92.5%
NTNCWS	28	92.9%			28	96.4%
TNCWS	187	95.7%			187	84.0%
<b>Lead and Copper Rule</b>						
CWS			319	100%	319	99.1%
NTNCWS			28	100%	28	100%
TNCWS			0		0	

**LIST OF SYSTEMS WITH VIOLATIONS IN 2002<sup>1</sup>**

**Inorganic Violations**

**Community and Noncommunity Water Systems**

**Nitrate/Nitrite Maximum Contaminant Level (MCL) (Average)**

**Violation**

Sibley, City of

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

Heart Butte Farmers Union Camp (Grant County)

McKenzie Ranger District (System Inactivated 2-18-03)

**Radionuclide Violations**

**Community Water Systems**

**Radium-226 Failure to Monitor Violation**

Meadowbrook Park Road and Water Inc (Cass County)\*

**Microbiological Violations**

**Community Water Systems**

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

Makoti, City of\*

Velva, City of

**Maximum Contaminant Level Violations (MCL)**

Benedict, City of\*

Bowdon, City of - 2

Dakota Adventist Academy (Burleigh County)\*

Goodrich, City of - 2

Makoti, City of

Page, City of

Peaceful Valley (Wells County)

Robinson, City of

Sibley, City of

Tower City, City of

Velva, City of

Warwick, City of - 2\*

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

**(FMma and MaR)Microbiological Violations**

Beach, City of

Brooktree Wells, Inc (Cass County)\*

Colony Park\*

Crary, City of - 3

Davenport, City of

Dazey, City of

Fradets Orchard Water System (Cass County)\*

Gardner, City of

Harwood, City of\*

Jud, City of\*

Karlsruhe, City of

Lincoln Meadows Trailer Court (Burleigh)\*

Litchville, City of - 2

## **Microbiological Violations Community Water Systems**

### **Failure to Monitor Major and Follow-Up Monitoring Violations (FMma and MaR)Microbiological Violations-continued**

Mapleton, City of  
Milton, City of -2  
Monango, City of - 5  
Osnabrock, City of  
Peaceful Valley (Wells County)- 6 \*-6  
Rhame, City of  
Robinson, City of  
Selfridge, City of \*  
Selkirk Settlement (Cass County) - 2  
Tower City, City of \*  
Wildrose, City of

### **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**

Bowdon, City of  
Burlington, City of  
Grand Forks Air Force Base (Grand Forks County)  
Plaza, City of \*

## **Microbiological Violations**

### **Noncommunity Water Systems**

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

Oakes Golf Club (Dickey County)

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

ADM Corn Processing (Pembina County)  
Alexander Water Spring (McKenzie County)  
Duane Jacques Water Hauler (Bottineau County)  
Hahn's Bay Recreation Area (Bottineau County)  
Indian Hills Resort (McLean County) \*  
Napoleon Livestock -2 (Logan County)\*  
Oakes Golf Club - 3 (Dickey County)  
Schatz's Point (Grant County)  
Tappen Public School (Kidder County)  
Triangle Y Camp (McLean County)

### **Failure to Monitor Major and Follow-Up Monitoring Violations (FMma and MaR)**

Asbury Camp Meeting Association (McLean County)  
Beaver Lake State Park (Logan County)  
Crossroads Restaurant -2 (Dunn County) \*-2  
DeMores Chateau (Billings County)  
Douglas Creek Rec Area (McLean County)  
Geneseo Bar and Café (Sargent County)  
Grandview Motel (Williams County) \*  
Harvest Moon Restaurant and Lounge - 2 (Hettinger County) \*-2  
Hurdsfield Dairy King (Wells County)  
Jamestown Campground (Stutsman County) \*  
LaMoure County Memorial Park (LaMoure County) \*  
Larry's Bar - 2 (Williams County) \*-2  
Lidgerwood Park (Richland County)\*  
Napoleon Livestock (Logan County)  
Oakes Golf Club (Dickey County)  
Pleasant Lake Rest Area (Benson County)

**(FMma and MaR) cont.:**

- Red Willow Lake Resort (Griggs County)\*
- Roughrider Camper Park (Ward County)
- Rud’s Interstate Standard (Morton County)\*
- Rugby Golf Club (Pierce County)\*
- Rugby Eagles Aerie #3834 (Pierce County)
- Sand Dune Saloon (Ransom County)
- Tappen Public School (Kidder County)
- The Lodge and Peanut Bar (Barnes County)
- Tobacco Garden Rec Area (McKenzie County) \*
- Town and Country Grill (Foster County)
- US Customs Service-Hannah (Cavalier County)
- Valley Inn Café (Ward County)
- Voyager Cove Camp (Mercer County) \*
- VFW Club (Williams County)
- Wishek Livestock Market Café (McIntosh 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 Annual Compliance Report.**

- Indian Hills Resort (McLean County) \*
- Munich Café and Bowl (Cavalier County)
- Red Willow Lake Resort (Griggs County)
- Town and Country Grill (Foster County)

**Surface Water Treatment Rule  
Community and Noncommunity Water Systems**

**Failure to Monitor Minor**

**NOTE: EPA does not require minor monitoring violations to be counted for the Annual Compliance Report.**

Washburn, City of

**Lead and Copper Rule  
Community and Nontransient Noncommunity Water Systems**

**Failure to Monitor/Report Violations**

- Colony Park (Ward County) \*
- Selfridge, City of - 2 \*-2
- Meadowbrook Park Road and Water (Cass County) \*

**Consumer Confidence Rule  
Community Water Systems**

**Adequacy/Availability/Content NOTE: EPA does not require minor monitoring violations to be counted for the Annual Compliance Report.**

- Jud, City of (Returned to Compliance 11-20-02)
- Minot Mobile Estates (Ward County)

**Public Notification Rule\***

**Failure to Provide Required Annual Public Notification of Secondary Maximum Contaminant Level (SMCL) for Fluoride-continuing requirement**

- Abercrombie, City of\*
- Noonan, City of\*

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).

\* Indicates throughout the listing of both community and noncommunity violations in this report that a violation was also issued to the system for failure to provide proof of Public Notification (PN) for the original violation. One \* indicates one PN violation. \*-2 indicates that two PN violations were issued, etc. The listing for Fluoride SMCL Failure to provide proof of PN is listed separately since these violations were issued prior to 2002 and have not been previously listed in the violations categories.