

SUMMARY OF ANNUAL DRINKING WATER COMPLIANCE REPORT FOR 2001

prepared by the

Drinking Water Program
Municipal Facilities Division
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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 2001 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 2001, 321 systems were classified as Community Water Systems (CWSs), 29 as Nontransient Noncommunity Water Systems (NTNCWSs), and 196 as Transient Noncommunity Water Systems (TNCWSs) for a total of 546 PWSs.

2001 SDWA Violations

The following tables depict SDWA violations incurred by North Dakota PWSs in calendar year 2001 and include: unresolved violations (from previous calendar years); and, violations that cross calendar year 2001 (i.e., violations determined in 2002 based on 2001 monitoring data). There were a total of 202 violations and 107 systems in violation in North Dakota for 2001.

State: North Dakota

Reporting Interval:

January 2001 - December 2001

| | MCL (mg/L) ¹ | 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 |
| INORGANIC CONTAMINANTS | | | | | | | |
| | | | | | | | |
| Total nitrate and nitrite | 10 (as Nitrogen) | | | | | 5 | 5 |
| Subtotal | | | | | | 5 | 5 |
| ORGANIC CONTAMINANTS | | | | | | | |
| 1,1,1-Trichloroethane | 0.2 | | | | | 3 | 2 |
| 1,1,2-Trichloroethane | 0.005 | | | | | 3 | 2 |
| 1,1-Dichloroethylene | 0.007 | | | | | 3 | 2 |
| 1,2,4-Trichlorobenzene | 0.07 | | | | | 3 | 2 |
| 1,2-Dichloroethane | 0.005 | | | | | 3 | 2 |
| 1,2-Dichloropropane | 0.005 | | | | | 3 | 2 |
| Acrylamide | | | | 1 | 1 | | |
| Benzene | 0.005 | | | | | 3 | 2 |
| Carbon Tetrachloride | 0.005 | | | | | 3 | 2 |
| cis-1,2-Dichloroethylene | 0.07 | | | | | 3 | 2 |
| Dichloromethane | 0.005 | | | | | 3 | 2 |
| Ethylbenzene | 0.7 | | | | | 3 | 2 |
| Monochlorobenzene | 0.1 | | | | | 3 | 2 |

State: North Dakota

Reporting Interval:

January 2001 - December 2001

| | MCL (mg/L) ¹ | 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 |
| o-Dichlorobenzene | 0.6 | | | | | 3 | 2 |
| para-Dichlorobenzene | 0.075 | | | | | 3 | 2 |
| Styrene | 0.1 | | | | | 3 | 2 |
| Tetrachloroethylene | 0.005 | | | | | 3 | 2 |
| Toluene | 1 | | | | | 3 | 2 |
| trans-1,2-Dichloroethylene | 0.1 | | | | | 3 | 2 |
| Trichloroethylene | 0.005 | | | | | 3 | 2 |
| Vinyl chloride | 0.002 | | | | | 3 | 2 |
| Xylenes (total) | 10 | | | | | 3 | 2 |
| Subtotal | | | | 1 | 1 | 63 | 2 |
| TOTAL COLIFORM RULE | | | | | | | |
| Acute MCL violation | Presence | 2 | 2 | | | | |
| Non-acute MCL violation | Presence | 42 | 29 | | | | |
| Major routine and follow up monitoring | | | | | | 85 | 66 |
| Subtotal | | 44 | 29 | | | 85 | 66 |
| Minor routine and follow up monitoring | | | | | | 13 | 12 |
| NOTE: EPA does not require minor monitoring violations to be counted for the ACR. | | | | | | | |

State: North Dakota

Reporting Interval:

January 2001 - December 2001

| | MCL (mg/L) ¹ | 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 |
| SURFACE WATER TREATMENT RULE | | | | | | | |
| Treatment techniques | | | | 1 | 1 | | |
| Subtotal | | | | 1 | 1 | | |
| LEAD AND COPPER RULE | | | | | | | |
| Follow-up or routine lead and copper tap M/R | | | | | | 3 | 3 |
| Subtotal | | | | | | 3 | 3 |

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, 2002, is from January 1, 2001 through December 31, 2001.

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 2001) 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 | Percentage of Systems with <u>No</u> Violations |
| Organic Contaminants | | | | | | |
| Community Water Systems (CWS) | 321 | 100% | 321 | 100% | 321 | 99.38% |
| Nontransient Noncommunity Water Systems (NTNCWS) | 29 | 100% | 29 | 96.55% | 29 | 100% |
| Transient Noncommunity Water Systems (TNCWS) | 0 | | | | 0 | |
| Inorganic Contaminants | | | | | | |
| CWS | 321 | 100% | | | 321 | 99.07% |
| NTNCWS | 29 | 100% | | | 29 | 100% |
| TNCWS | 196 | 100% | | | 196 | 98.98% |

| | 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 |
| Radionuclides | | | | | | |
| CWS | 321 | 100 % | | | 321 | 100 % |
| NTNCWS | 0 | | | | 0 | |
| TNCWS | 0 | | | | 0 | |
| Total Coliform Rule | | | | | | |
| CWS | 321 | 96.26 % | | | 321 | 89.72 % |
| NTNCWS | 29 | 86.21 % | | | 29 | 89.66 % |
| TNCWS | 196 | 93.4 % | | | 196 | 84.7% |
| Surface Water Treatment Rule¹ | | | | | | |
| CWS | | | 18 | 100 % | 18 | 100 % |
| NTNCWS | | | 8 | 87.5 % | 8 | 100 % |
| TNCWS | | | 2 | 100 % | 2 | 100 % |
| Lead and Copper Rule | | | | | | |
| CWS | | | 321 | 100% | 321 | 99.07 % |
| NTNCWS | | | 29 | 100% | 29 | 100 % |
| TNCWS | | | 0 | | 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 2001¹

Organic Violations

Community and Noncommunity Water Systems

1,1-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane;
1,2 Dichloroethane; 1,2-Dichloropropane; 1,2,4-Trichlorobenzene;
Benzene; Carbon Tetrachloride; cis-1,2-Dichloroethylene;
Dichloromethane; Ethylbenzene; Monochlorobenzene; o-
dichlorobenzene; p-Dichlorobenzene; Styrene; Tetrachloroethylene;
Toluene; trans-1,2-Dichloroethylene; Trichloroethylene;
Trichloroethylene; vinyl Chloride; Xylenes, Total

Failure to Monitor

Colony Park (Ward County)
Willow City, City of -2 (Site 101 and Site 102)

Acrylamide Treatment Technique Violation

Coyote Station (Mercer County)

Inorganic Violations

Community and Noncommunity Water Systems

Total Nitrate and Nitrite Failure to Monitor Violation

Colony Park (Ward County)
Hague, City of
Larry's Bar (Williams County)
Tobacco Garden Rec Area (McKenzie County)
Willow City, City of

Microbiological Violations

Community Water Systems

Acute Maximum Contaminant Level Violations (MCLA)

none

Maximum Contaminant Level Violations (MCL)

Aneta, City of
Bowdon, City of
Devils Lake, City of
Flaxton, City of
Forman, City of
Grenora, City of - 2
Missouri River Correctional Center (Burleigh County)
Oberon, City of
Prairie Learning Center (Grant County)
Ramsey Rural Water & Sewer (Ramsey County)
Selz Water Users Association - 2 (Pierce County)
Walcott, City of

Failure to Monitor Major and Follow-Up Monitoring Violations

(FMma and MaR)Microbiological Violations

Abercrombie, City of - 4
Almont, City of
Battleground Addition (Ward County)
Chrisan Water Users Association (Cass County)
Cleveland, City of
Crary, City of - 3
Dazey, City of
Forest River Colony
Fradets Orchard Water System (Cass County)
Hankinson, City of
Hazelton, City of

FMma and MaR cont'

Hettinger, City of
Hope, City of
Horseshoe Bend Addition (Cass County)
Langdon Rural Water Users (Cavalier County)
Lansford, City of
Litchville, City of
Makoti, City of
Meadowbrook Park Road & Water - 2 (Cass County)
Mercer, City of
Milton, City of
Minot Mobile Estates - 3 (Ward County)
Monango, City of - 4
New Hradec Waterworks (Dunn County)
Peaceful Valley - 3 (Wells County)
Plaza, City of
Reeder, City of
Rock Lake, City of
Selfridge, City of
Taylor, City of
University of Mary (Burleigh County)
Venturia, City of (system currently inactive)
Wyndmere, 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**

Medora, City of -2
Wishek, City of
Meadowbrook Park Road & Water (Cass County)
Beulah, City of
Watford City, City of

Microbiological Violations

Noncommunity Water Systems

Acute Maximum Contaminant Level Violations (MCLA)

Cargill Malt (Stutsman County)
Long Lake NWR (Burleigh County)

Maximum Contaminant Level Violations (MCL)

Alexander Water Spring - 3 (McKenzie County)
Asbury Camp Meeting Association (McClean County)
Birchwood Inc. (Bottineau County)
Cargill Malt - 2 (Stutsman County)
Cross Ranch State Park (Oliver County)
Des Lacs NWR (Ward County)
Fordville Public School - 3 (Walsh County)
Johnson Corners Christian Academy (McKenzie County)
Little Yellowstone Park - 3 (Barnes County)
Long Lake NWR (Burleigh County)
Metigoshe Ministries-Center site (Bottineau County)
Minot Country Club - 2 (system currently inactive) (Ward County)
Munich Café and Bowl - 3 (Cavalier County)
Noonan City Well (Coffee) (Divide County)
Sportsman's Bar (Stutsman County)
Sully's Hill Nat'l Game Preserve (Benson County)
Tobacco Garden Recreation Area - 2 (McKenzie County)

Failure to Monitor Major and Follow-Up Monitoring Violations

(FMma and MaR)

Arnegard Café (McKenzie County)
Arnegard Ballpark - 2 (McKenzie County)
Crossroads Restaurant (Dunn County)
Dawson Café (Kidder County)
Fordville Public School (Walsh County)
Fort Buford State Historical Society (Williams County)
Grandview Motel - 3 (Williams County)

(FMma and MaR) cont.:

Johnson Corners Christian Academy (McKenzie County)
Kautzman Brothers Mfg. (Cass County)
Knickerbocker Liquor Locker (Cass County)
KOA Campground- Minot (Ward County)
Lakeview Supper Club (Richland County)
LaMoure County Memorial Park (LaMoure County)
Lidgerwood Park (Richland County)
Long X Saloon - 2 (McKenzie County)
Long Lake NWR (Burleigh County)
Munich Bar - 2 (Cavalier County)
Orvin Loftsgard Water Hauler (Walsh County)
Pinky's Club (Dunn County)
Rick's Place (Pierce County)
Sand Dune Saloon (Ransom County)
Sarles Bar (Cavalier County)
Scruffy's Bar - 2 (system currently inactive) (Burleigh County)
Sully's Hill Nat'l Game Preserve (Benson County)
The Big D (Kidder County)
Tioga Golf & Country Club (Williams County)
TJ's Bar & Lanes (Benson County)
Triangle Y Camp (McClean County)
US Port of Entry-St. John (Rolette County)
Valley Inn Café (Ward County)
VFW Club (Williams County)
Voyager Cove Camp (Mercer County)
Woodland Resort (Ramsey 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.

Bottineau Winter Park Ski Area (Bottineau County)

Larson's Drive Inn (Grand Forks county)

Noonan City Well (Coffee) (Divide County)

Orvin Loftsgaard Water Hauler (Walsh County)

Senior Citizen Building (Burke County)

The Lodge & Peanut Bar (Barnes County)

Triangle Y Camp (McClellan County)

Surface Water Treatment Rule

Community and Noncommunity Water Systems

Treatment Technique Violations

Cargill, Inc. (Richland County)

Lead and Copper Rule

Community and Nontransient Noncommunity Water Systems

Failure to Monitor/Report Violations

Colony Park (Ward County)

Crary, City of

Minot Mobile Estates (Ward County)

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