



Providing Safe Drinking Water In America

1999 National Public Water Systems Compliance Report

1999 National Public Water Systems Compliance Report 1999 National Public
Water Systems Compliance Report 1999 National Public Water Systems
Compliance Report 1999 National Public Water Systems Compliance Report
1999 National Public Water Systems Compliance Report 1999 National
Public Water Systems Compliance Report 1999 National Public Water
Systems 1999 National Public Water Systems Compliance Report 1999
National Public Water Systems Compliance Report 1999 National Public
Water Systems Compliance Report 1999 National Public Water Systems
Compliance Report 1999 National Public Water Systems Compliance Report
1999 National Public Water Systems Compliance Report 1999 National Public
Water Systems 1999 National Public Water Systems Compliance Report
1999 National Public Water Systems Compliance Report 1999 National
Public Water Systems Compliance Report 1999 National Public Water
Systems Compliance Report 1999 National Public Water Systems
Compliance Report 1999 National Public Water Systems Compliance
Report 1999 National Public Water Systems 1999 National Public Wat
Systems Compliance Report 1999 National Public Water Systems
Compliance Report 1999 National Public Water Systems Compliance
Report 1999 National Public Water Systems Compliance Report 1999 National
Public Water Systems Compliance Report 1999 National Public Water
Systems Compliance Report 1999 National Public Water Systems 199
National Public Water Systems Compliance Report 1999 National Public
Water Systems Compliance Report 1999 National Public Water Systems
Compliance Report 1999 National Public Water Systems Compliance Report
1999 National Public Water Systems Compliance Report 1999 National Public

Table of Contents

1999 National Summary of Public Water Systems Compliance

Introduction	1
PWS Compliance	1
Findings	2
Data Quality	7
Enforcement and Compliance Assistance Programs	8
Information on and Evaluation of State Reports	8
State-by-State Summaries	9
Conclusions and Activities to Address Recommendations	9

1999 National Summary of Compliance for Public Water Systems in Indian Country

Introduction	13
Public Water Systems on Indian Reservations	13
Public Water Systems in Alaska and Oklahoma	13
Data Quality	13
Findings	13
Compliance Assistance and Enforcement	15
Financial Assistance	15
Conclusions and Recommendations	17

Appendix A

Glossary of Terms	A-1
-------------------	-----

Appendix B

Summaries of State Annual Compliance Reports	B-1
--	-----

Appendix C

Map of Indian Lands	C-1
---------------------	-----

List of Tables

Table 1: Number of Public Water Systems on Tribal Lands with Violations by Rule	16
Table A-1: Significant Monitoring Violations for Annual State Public Water System Reports	A-4
Table A-2: Summary of Drinking Water Regulations for Public Water Systems During 1999	A-5
Table B-1: Summary of Elements Reported by States	B-4

Appendix A□

Glossary of Terms□

Administrative Order

Formal enforcement actions issued by EPA or a State to address noncompliance at a public water system, usually by means of a compliance schedule with enforceable milestone dates.

Chemical Rules

Refers collectively to regulations that protect the public from unsafe levels of organic chemicals, inorganic chemicals (other than lead and copper), and radioactivity in drinking water.

Community Water System

A public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents (e.g., homes, apartments and condominiums that are occupied year-round as primary residences).

Federally-recognized Indian Tribe

An Indian tribe, band, nation, pueblo, community, or Alaska Native Village that the Secretary of the Interior acknowledges to exist as an Indian tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. Section 479a. Maintained by the Department of the Interior, the list of federally-recognized tribes is updated periodically and published in the Federal Register. The latest list of federally-recognized Indian tribes is available at 65 Federal Register 12398 (March 13, 2000).

Health-based Violation

A violation of either a Maximum Contaminant Level or a Treatment Technique requirement.

Inorganic Chemicals

These non-carbon based compounds (such as metals, nitrates, and asbestos) can either occur naturally in some sources of drinking water or be introduced by human activity. EPA has established MCLs for 15 inorganic contaminants. Violations of standards for lead and copper are addressed separately.

Large System

A public water system that serves more than 10,000 people.

Lead and Copper Rule

Requires a public water system to take steps to minimize the risk of exposure to lead and copper in drinking water by monitoring for these contaminants, installing corrosion control where

required, and, where necessary, educating the public about ways to reduce exposure. A system may also be required to treat its source water or replace lead service lines.

Maximum Contaminant Level

The maximum permissible level of a contaminant in water delivered to any user of a public water system.

Monitoring and Reporting Violation

Refers to either a violation of a monitoring and reporting schedule or violation of contaminant-specific minimum testing schedules and operational reporting requirements. Those monitoring and reporting violations considered “significant” for the purposes of the state and national public water system compliance reports are described below in Table A-1.

Nitrate and Nitrite

Inorganic compounds that can enter water supplies, primarily from fertilizer runoff and sanitary wastewater discharges.

Non-transient Non-community Water System

A non-community public water system that regularly serves at least 25 of the same persons over six months per year. A typical example of a non-transient non-community water system is a school or an office building that has its own water source, such as a drinking water well.

Organic Chemicals

These carbon-based compounds, such as solvents and pesticides, can enter drinking water through a variety of means, including factory discharges or runoff from crop lands. EPA has established MCLs for 56 organic contaminants.

Primacy

The Safe Drinking Water Act requires EPA, States, and Tribes to work as partners to ensure delivery of safe drinking water to the public. Any State or Indian Tribe can request responsibility for operation and oversight of the drinking water program within its borders. In order to receive this responsibility (called “primary enforcement authority” or “primacy”), a State or Tribe must show, among other things, that it has adopted drinking water regulations that are at least as stringent as Federal regulations, and demonstrate its capacity both to enforce those regulations and to implement other activities necessary to ensure compliance.

In the absence of State or Tribal primacy, EPA assumes responsibility for administering the drinking water program for that area. Of the 56 eligible States (defined to include Commonwealths, Territories, and the District of Columbia), all but Wyoming and the District of Columbia have primacy. During calendar year 1999, the EPA Regional Offices administered the drinking water program within these two jurisdictions and on all Tribal lands.

Primary Drinking Water Regulations

These are regulations that apply to public water systems; specify contaminants which, in the judgment of the Administrator, may have an adverse effect on the health of persons; and specify for each such contaminant either a maximum contaminant level or a treatment technique.

Public Water System

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 fifteen service connections or regularly serves at least twenty-five individuals at least 60 days out of the year. A public water system can be either a community water system, a non-transient non-community water system, or a transient non-community water system.

Radionuclides

Radioactive particles, such as radium-226, radium-228, gross alpha, and beta particle/photon radioactivity, can occur naturally in water or may result from human activity. EPA has established MCLs for beta/photon emitters, alpha emitters, and combined radium 226/228.

Regional Offices

Responsible for implementing Environmental Protection Agency programs within their respective jurisdictions. Regional Offices cooperate with Federal, State, interstate, and local agencies, as well as with industry, academic institutions, and other private groups to ensure that Regional needs are addressed and that Federal environmental laws are upheld.

Small Systems

Public water systems that serve no more than 3,300 people.

Surface Water Treatment Rule

The Surface Water Treatment Rule (SWTR) requires a public water system served by surface water or by ground water under the influence of surface water to take steps (such as disinfection, filtration followed by disinfection, or watershed control) to reduce potential exposure to microbiological contamination.

Total Coliform Rule

Establishes limits on coliform bacteria in water distribution systems. Although coliform bacteria, which are found in decaying organic material and in the intestinal tract of humans and animals, are usually not harmful to human health, their presence may indicate the presence of other, more dangerous microbial contamination.

SDWIS/FED

EPA's database for collecting safe drinking water monitoring results from oversight agencies. SDWIS stands for Safe Drinking Water Information System. Public Water Systems are required to report all monitoring results to the primary enforcement authority. States with primacy, or EPA where it administers the program, analyze the monitoring results, determine compliance, and report violations to EPA on a quarterly basis. EPA maintains records of these violations in SDWIS/FED. SDWIS/FED records only violations, not results that demonstrate compliance with drinking water standards.

Total Trihalomethanes

These chemicals can be by-products of chemical processes used to disinfect drinking water.

Transient Non-community Water System

A non-community water system that regularly serves at least 25 people (but not the same 25) over six months per year. A typical example is a campground or a highway rest stop that has its own water source, such as a drinking water well.

Treatment Technique

In cases where EPA has determined it is not technically or economically feasible to establish an MCL, the Agency can instead specify a treatment technique. These are treatment methods required by EPA to minimize the level of a contaminant in drinking water.

Variations and Exemptions

A public water system that cannot comply with a drinking water standard because of poor source water quality, or, in the case of small systems, inadequate financial resources, can be granted a variance to comply with less stringent, but still protective standards based on a specific EPA-approved technology available to the system. An exemption allows a PWS with compelling circumstances (including economic considerations) additional time to achieve compliance with applicable SDWA requirements, so long as public health is adequately protected.

TABLE A-1: SIGNIFICANT MONITORING VIOLATIONS FOR ANNUAL STATE PUBLIC WATER SYSTEM REPORTS

Rule	Violation Type	Description	SDWIS Violation Code ¹	SDWIS Contaminant Code	
Total Coliform Rule	Major routine	No samples collected during a compliance period	23	3100	
	Major repeat	No follow-up samples collected after a positive total coliform sample or no speciation	25	3100	
Surface Water Treatment Rule	Major (filtered)	Collected less than 90% of samples required during a compliance period	36	None	
	Major (unfiltered)	Collected less than 90% of samples required during a compliance period	31	None	
Lead and Copper Rule	Initial lead and copper tap	Either failed to collect the initial tap samples, and then failed to correct that omission within a) 3 months for large systems, b) 6 months for medium systems, or c) 12 months for small systems; or failed to submit the associated report	51		
	Follow-up or routine lead and copper tap	Failed to collect 1 or more required samples	52		
C h e m	Phase I, II, IIB, and V Rules	Regular monitoring	Failed to collect any required samples ²	03	By contaminant
	Total Trihalomethanes	Regular monitoring	Failed to collect any required samples	03	2950
	Radionuclides	Regular monitoring	Failed to collect any required samples	03	4000, 4100, 4010

1 EPA's Safe Drinking Water Information System (SDWIS/FED) makes no distinction between the sampling violations and the reporting violations associated with a sample collection requirement. Both violations are reported under the same violation code.

2 Failure to collect "any required samples" means none of the required samples were collected.

**TABLE A-2: SUMMARY OF DRINKING WATER REGULATIONS FOR
PUBLIC WATER SYSTEMS DURING 1999**

Applicability of Regulations			
Contaminant/Rule	Community Water Systems	Non-transient Non-Community Water Systems	Transient Non-Community Water Systems
Organic Contaminants	All	All	Some (Only epichlorohydrin and acrylamide)
Total Trihalomethanes (TTHM)	Some (Only systems serving more than 10,000)	None	None
Inorganic Contaminants	All	Some (All except arsenic and fluoride)	None
Nitrate and Nitrite	All	All	All
Radionuclides	All	None	None
Total Coliform	All	All	All
Surface Water Treatment	Some (Only PWSs using surface water sources or ground water sources under the direct influence of surface water)	Some (Only PWSs using surface water sources or ground water sources under the direct influence of surface water)	Some (Only PWSs using surface water sources or ground water sources under the direct influence of surface water)
Lead and Copper	All	All	None

Appendix B

Summaries of State Annual Compliance Reports

CONTENTS

Alabama	B-7	Montana	B-35
Alaska	B-8	Nebraska	B-36
American Samoa	B-9	Nevada	B-37
Arizona	B-10	New Hampshire	B-38
Arkansas	B-11	New Jersey	B-39
California	B-12	New Mexico	B-40
Colorado	B-13	New York	B-41
Connecticut	B-14	North Carolina	B-42
Delaware	B-15	North Dakota	B-43
District of Columbia	B-16	Northern Mariana Islands	B-44
Florida	B-17	Ohio	B-45
Georgia	B-18	Oklahoma	B-46
Guam	B-19	Oregon	B-47
Hawaii	B-20	Pennsylvania	B-48
Idaho	B-21	Puerto Rico	B-49
Illinois	B-22	Rhode Island	B-50
Indiana	B-23	South Carolina	B-51
Iowa	B-24	South Dakota	B-52
Kansas	B-25	Tennessee	B-53
Kentucky	B-26	Texas	B-54
Louisiana	B-27	Utah	B-55
Maine	B-28	Vermont	B-56
Maryland	B-29	Virgin Islands	B-57
Massachusetts	B-30	Virginia	B-58
Michigan	B-31	Washington	B-59
Minnesota	B-32	West Virginia	B-60
Mississippi	B-33	Wisconsin	B-61
Missouri	B-34	Wyoming	B-62

This Appendix presents a summary of each state report in a standardized format. The format includes an overall summary of the violations data specified in Section 1414 of the 1996 Safe Drinking Water Act (SDWA) Amendments (i.e., violations with respect to maximum contaminant levels (MCLs), treatment technique violations, significant monitoring and reporting requirements, and variance and exemptions).

This Appendix summarizes the data reported by the States, but does not interpret it. Therefore, other factors must be taken into account before drawing conclusions about a State program. For example, public water systems are required to report all violations to the State, but State drinking water programs vary in the regulations they choose to emphasize. A State that decided to focus attention and resources on one particular rule may have discovered and reported many more violations of that rule than a State that chose to focus on a different rule. A disproportionate number of violations in a State could also indicate that the State needs to work with its public water systems to improve their compliance.

Readers are cautioned to view the violations data provided in the State summaries within the context of each State and its individual drinking water program.

In 1999, EPA received State Public Water System Compliance Reports from 51 of the 54 primary states, Commonwealths, and Territories. As in past years, American Samoa, Guam, and the Northern Mariana Islands did not submit reports, and, with limited exceptions, did not supply information to SDWIS/FED. Appendix B supplies what information is available in SDWIS/FED to indicate violations at public water systems in the Pacific territories.

Because the District of Columbia, Wyoming, and Indian Tribes did not have primary enforcement responsibility for drinking water in calendar year 1999, EPA prepared reports for those jurisdictions.

Violations for 1999

EPA summarizes the number of MCL, treatment technique, and significant monitoring violations¹ reported by each state in four categories:

- 1 A comprehensive definition of significant monitoring and reporting violations including exceptions to the definition for the Total Coliform Rule and Lead and Copper Rule appears in Appendix A.
- 2 MCL and significant monitoring violations for organic, inorganic, total trihalomethane (TTHM), nitrate and nitrite, and radionuclide contaminants.

- Violations of chemical contaminant requirements²
- Violations of the Total Coliform Rule
- Violations of the Surface Water Treatment Rule
- Violations of the Lead and Copper Rule.

EPA summarizes the numbers of individual public water systems in violation in each of these four categories, as reported by the state.

If a state's report did not include information in a category, EPA's summary notes the omission.

1999 Totals

EPA also summarizes the total number of systems in each state, the total number of violations reported, and the total number of PWSs in violation, if the state reported this information.

Systems in Violation

Systems in Violation is defined as the number of different systems with a reported violation of this type. Some states counted a system with multiple violations or violations in more than one category as one violating system. Other states counted a violating system each time it had a violation, or once for each of the regulatory categories in which it had a violation. If EPA's review of a state's report indicated some violating systems were counted more than once, an asterisk notes that the state's number possibly overcounts violating systems.

Variations and Exemptions

There were no reported violations of variations and exemptions in 1999.

Where to Obtain the 1999 Annual Public Water Systems Report

If a state's report includes information on how to obtain a copy of the report, that information is provided on the state summary page in this Appendix.

TABLE B-1: SUMMARY OF ELEMENTS REPORTED BY STATES

State	Submitted Report	Reported On Violations Categories			Reported on V/E	Provided Inventory Information	Identified Size and Type of Violating Systems	Discussed Compliance and Enforcement Responses	Identified Each System with MCL and TT Violations	Provided Information to Public on Availability	Provided Additional Information ¹
		MCL	M/R	TT							
Alabama	x	x	x	x	x	x		x	x	x	x
Alaska	x	x	x	x	x	x	x	x	x	x	x
American Samoa	Did not submit report.										
Arizona	x	x	x	x		x				x	
Arkansas	x	x	x	x	x	x		x	x	x	
California	x	x	x	x				x	x	x	x
Colorado	x	x	x	x	x	x			x		x
Connecticut	x	x	x	x		x	x	x	x		x
Delaware	x	x	x	x		x		x	x	x	x
District of Columbia	x	x	x	x	x	x	x	x	x	x	x
Florida	x	x	x	x	x	x				x	
Georgia	x	x	x	x	x			x	x	x	x
Guam	Did not submit report.										
Hawaii	x	x	x	x	x	x		x	x	x	x
Idaho	x	x	x	x	x	x		x	x	x	x
Illinois	x	x	x	x	x	x		x			x
Indiana	x	x	x	x	x	x	x	x		x	x
Iowa	x	x	x	x	x	x		x	x	x	x
Kansas	x	x	x	x	x	x		x	x	x	x
Kentucky	x	x	x	x	x	x				x	
Louisiana	x	x	x	x		x			x	x	x
Maine	x	x	x	x		x			x		
Maryland	x	x	x	x		x	x	x	x		x
Massachusetts	x	x	x	x	x	x	x	x	x	x	
Michigan	x	x	x	x	x	x			x	x	
Minnesota	x	x	x	x		x				x	x
Mississippi	x	x	x		x	x		x	x		
Missouri	x	x	x	x	x	x		x	x	x	x
Montana	x	x	x	x	x	x		x		x	x
Nebraska	x	x	x	x	x	x	x	x		x	x
Nevada	x	x				x			x	x	x

1. An "x" in this column indicates the state submitted more information in its report than the minimum EPA recommends in guidance.

TABLE B-1: SUMMARY OF ELEMENTS REPORTED BY STATES (continued)

State	Submitted Report	Reported On Violations Categories			Reported on V/E	Provided Inventory Information	Identified Size and Type of Violating Systems	Discussed Compliance and Enforcement Responses	Identified Each System with MCL and TT Violations	Provided Information to Public on Availability	Provided Additional Information ¹
		MCL	M/R	TT							
New Hampshire	x	x	x	x	x	x	x	x	x	x	x
New Jersey	x	x	x	x	x	x		x	x	x	x
New Mexico	x	x	x	x	x	x			x		
New York	x	x	x	x	x	x				x	x
North Carolina	x	x	x	x	x	x					
North Dakota	x	x	x	x	x	x			x	x	x
Northern Mariana Islands	Did not submit report.										
Ohio	x	x	x	x	x	x		x	x	x	x
Oklahoma	x	x	x	x		x		x	x	x	x
Oregon	x	x	x	x	x	x	x	x	x	x	x
Pennsylvania	x	x	x	x	x	x	x		x	x	x
Puerto Rico	x	x	x	x							
Rhode Island	x	x	x	x		x		x			x
South Carolina	x	x	x	x	x	x		x		x	x
South Dakota	x	x	x	x	x	x					
Tennessee	x	x	x	x	x	x		x	x	x	x
Texas	x	x	x	x	x	x			x	x	x
Utah	x	x	x	x							
Vermont	x	x	x	x	x	x		x		x	x
Virgin Islands	x	x			x	x	x		x		x
Virginia	x	x	x	x		x		x	x		
Washington	x	x	x	x	x	x			x	x	
West Virginia	x	x	x	x	x	x		x	x	x	
Wisconsin	x	x ²	x ²	x	x	x	x	x		x	x
Wyoming	x	x	x	x	x	x			x		

1. An "x" in this column indicates the state submitted more information in its report than the minimum EPA recommends in guidance.
2. Wisconsin did not report TCR violations.

State of Alabama 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	2	2			202	31*
Total Coliform Rule	32	31			71	51
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	18	18

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	736
Total Number of Systems in Violation	NR
Total Number of Violations	325

Where to Obtain the 1999 Annual State Public Water Systems Report

Alabama's State Report is available by contacting ADEM, Water Supply Branch, P.O. Box 301463, Montgomery, AL 36130-1463, or by accessing the state's web site at www.adem.state.al.us/viorep99.html.

E-mail: tsd@adem.state.al.us

State of Alaska 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	7	6			3,096	344
Total Coliform Rule	37	35			1,407	698
Surface Water Treatment Rule			310	89	520	114
Lead and Copper Rule			0	0	228	228

Total Number of Regulated Systems	1,689
Total Number of Systems in Violation	946
Total Number of Violations	5,605

Where to Obtain the 1999 Annual State Public Water Systems Report

Alaska's State Report is available by accessing the state's web site at www.state.ak.us/dec/deh/water.

American Samoa 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			0	0
Total Coliform Rule	0	0			0	0
Surface Water Treatment Rule			14	14	0	0
Lead and Copper Rule			0	0	0	0

Total Number of Regulated Systems	22
Total Number of Systems in Violation	14
Total Number of Violations	14

Where to Obtain the 1999 Annual State Public Water Systems Report

American Samoa did not publish an Annual Report. EPA generated data from SDWIS/FED.

State of Arizona 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	20	14			347	196
Total Coliform Rule	214	155			306	51
Surface Water Treatment Rule			88	8	0	0
Lead and Copper Rule			0	0	0	0

Total Number of Regulated Systems	1,709
Total Number of Systems in Violation	312
Total Number of Violations	975*

The text of the state report lists the total number of violations as 955, while the individual category numbers given (shown above) total 975.

Where to Obtain the 1999 Annual State Public Water Systems Report

Arizona's statewide annual and bi-annual reports and specific PWS compliance status reports can be obtained by contacting the state at Arizona Department of Environmental Quality, Water Quality Compliance Section, 3033 North Central Avenue, Phoenix, Arizona 85012-2809.

Telephone: (602) 207-4624.

State of Arkansas 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	26	11			0	0
Total Coliform Rule	142	119			250	190
Surface Water Treatment Rule			140	31	75	37
Lead and Copper Rule			1	1	4	4

Total Number of Regulated Systems	1,190
Total Number of Systems in Violation	NR
Total Number of Violations	638

Where to Obtain the 1999 Annual State Public Water Systems Report

Arkansas' State Report is available by contacting the Arkansas Department of Health, Division of Engineering, 4815 West Markham Street, Little Rock, AR 72205-2032, or by accessing the state's web site at www.healthylarkansas.com/eng/.

Telephone: (501) 661-2623
 Fax: (501) 661-2032
 E-mail: scorder@mail.doh.state.ar.us

State of California 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	26	25*			0	0
Total Coliform Rule	366	306			626	410
Surface Water Treatment Rule			83	68	0	0
Lead and Copper Rule**			Not Available	Not Available	Not Available	Not Available

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

** California does not collect data on lead and copper violations.

Total Number of Regulated Systems	NR
Total Number of Systems in Violation	NR
Total Number of Violations	1,101

Where to Obtain the 1999 Annual State Public Water Systems Report

California's State Report is available by contacting the State at California Department of Health Services, Division of Drinking Water and Environmental Management, or by accessing the web site at <http://www.dhs.ca.gov/ps/ddwem/publications/pubindex.htm>.

Telephone: (916) 323-6111

State of Colorado 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			47	29
Total Coliform Rule	85	63			519	370
Surface Water Treatment Rule			47	27	47	19
Lead and Copper Rule			8	7	21	21

Total Number of Regulated Systems	2,100
Total Number of Systems in Violation	NR
Total Number of Violations	774

Where to Obtain the 1999 Annual State Public Water Systems Report

Colorado's State Report is available by contacting the state at Compliance Monitoring-Data Management, WQCO-CMDM-B2, 4300 Cherry Creek Drive South, Denver, CO 80246-1530.

State of Connecticut 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	22*	8			712	35
Total Coliform Rule	233	122			146	100
Surface Water Treatment Rule			3	3	0	0
Lead and Copper Rule			32	31	36	34

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	4,600
Total Number of Systems in Violation	NR
Total Number of Violations	1,184

Where to Obtain the 1999 Annual State Public Water Systems Report

Connecticut's State Report is available at the public libraries or by contacting the Water Supplies Section, Department of Public Health, 450 Capitol Avenue, Hartford, CT 06134. To schedule an appointment to review this document at the Water Supplies Section, call (860) 509-7333.

State of Delaware 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	24	14			1	1
Total Coliform Rule	40	34*			0**	0
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	8	8

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

** Although Delaware's report table shows 1 system with 1 violation, its list of violators by system shows no violations.

Total Number of Regulated Systems	566
Total Number of Systems in Violation	142
Total Number of Violations	73

Where to Obtain the 1999 Annual State Public Water Systems Report

Information on Delaware's public water systems is available by accessing EPA's Envirofacts web site at www.epa.gov/enviro/html/sdwis/sdwis_query.html.

District of Columbia 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			0	0
Total Coliform Rule	0	0			0	0
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	0	0

Total Number of Regulated Systems	2
Total Number of Systems in Violation	0
Total Number of Violations	0

Where to Obtain the 1999 Annual State Public Water Systems Report

The District of Columbia's State Report is available by contacting George Rizzo, DC PWSS Program Manager, Drinking Water Branch (3WP22), U.S. EPA Region III, 1650 Arch Street, Philadelphia, PA 19103-2029, or by accessing the web site at www.epa.gov/reg3wapd/drinkingwater/links.htm.

Telephone: (215) 814-5781
 Fax: (215) 814-2318
 E-mail: rizzo.george@epa.gov

State of Florida 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	20	16			233	202
Total Coliform Rule	283	258			910	702
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	3	2

Total Number of Regulated Systems	~7,000
Total Number of Systems in Violation	NR
Total Number of Violations	1,449

Where to Obtain the 1999 Annual State Public Water Systems Report

Florida's State Report Summary, state rules, forms, and drinking water inventory are available by accessing the state's web site at www.dep.state.fl.us/water/Wf/dw/default.htm.

State of Georgia 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	1	1			414	316
Total Coliform Rule	136	102			709	489
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	49	49

Total Number of Regulated Systems	NR
Total Number of Systems in Violation	NR
Total Number of Violations	1,309

Where to Obtain the 1999 Annual State Public Water Systems Report

Georgia's State Report is available by contacting Doug Davenport, Department of Natural Resources, Environmental Protection Division, Drinking Water Program, Information Management Unit, 205 Butler St., SE, Suite 1362, Atlanta, GA 30334.

Telephone: (404) 651-5162

Guam 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			0	0
Total Coliform Rule	0	0			0	0
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	2	2

Total Number of Regulated Systems	12
Total Number of Systems in Violation	2
Total Number of Violations	2

Where to Obtain the 1999 Annual State Public Water Systems Report

Guam did not publish an Annual Report. EPA generated data from SDWIS/FED.

State of Hawaii 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			0	0
Total Coliform Rule	3	2			0	0
Surface Water Treatment Rule			60	6	0	0
Lead and Copper Rule			0	0	0	0

Total Number of Regulated Systems	135
Total Number of Systems in Violation	8
Total Number of Violations	63

Where to Obtain the 1999 Annual State Public Water Systems Report

Hawaii's State Report is available by contacting the Hawaii Department of Health, Safe Drinking Water Branch, Environmental Management Division, 919 Ala Moana Boulevard, Room 308, Honolulu, HI 96814-4920.

Telephone: (808) 586-4258

State of Idaho 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	30	13			263	218
Total Coliform Rule	229	200			638	487
Surface Water Treatment Rule			187	24	0	0
Lead and Copper Rule			0	0	15	15

Total Number of Regulated Systems	2,075
Total Number of Systems in Violation	768
Total Number of Violations	1,362

Where to Obtain the 1999 Annual State Public Water Systems Report

Idaho's State Report is available by contacting the Idaho Division of Environmental Quality's six Regional Offices or the state's seven district health departments, or by accessing the state's web site at www.state.id.us/deq/.

State of Illinois 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	199	131			1,812	76
Total Coliform Rule	157	140			296	159
Surface Water Treatment Rule			1	1	0	0
Lead and Copper Rule			36	25	87	77

Total Number of Regulated Systems	6,072
Total Number of Systems in Violation	495
Total Number of Violations	2,588

Where to Obtain the 1999 Annual State Public Water Systems Report

Illinois' State Report is available by contacting the Illinois EPA's Division of Public Water Supplies, #13, P.O. Box 9276, Springfield, IL 62794-9276.

Telephone: (217) 785-8653

State of Indiana 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	34	14			810	707*
Total Coliform Rule	310	270			2,725	1,489
Surface Water Treatment Rule			15	7	0	0
Lead and Copper Rule			45	42	145	84

* Possibly overcounts violating systems.

Total Number of Regulated Systems	4,255
Total Number of Systems in Violation	1,906
Total Number of Violations	4,084

Where to Obtain the 1999 Annual State Public Water Systems Report

Indiana's State Report is available by contacting the Indiana Department of Environmental Management, Office of Water Management, Drinking Water Branch, or by accessing the web site www.state.in.us/idem/owm/dwb/index.html.

Telephone: (317) 308-3280

State of Iowa 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	169	155			473	365
Total Coliform Rule	203	144			325	236
Surface Water Treatment Rule			7	5	0	0
Lead and Copper Rule			52	43	29	25

Total Number of Regulated Systems	2,006
Total Number of Systems in Violation	NR
Total Number of Violations	1,258

Where to Obtain the 1999 Annual State Public Water Systems Report

Iowa's State Report is available by contacting the Iowa Department of Natural Resources, Water Supply Section, Wallace State Office Building, 900 East Grand Avenue, Des Moines, IA 50319-0034, or by accessing the state's web site at www.state.ia.us/government/dnr/organiza/epd/wtrsuply/pwscmp97.htm.

State of Kansas 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	121*	50*			0	0
Total Coliform Rule	74	67			65	35
Surface Water Treatment Rule			26	12	4	4
Lead and Copper Rule			5	5	13	13

*The state report gives different counts in the text of the report and in accompanying tables. Counts from the text of the report are shown here. Possible overcounting of violating systems.

Total Number of Regulated Systems	1,106
Total Number of Systems in Violation	165
Total Number of Violations	308

Where to Obtain the 1999 Annual State Public Water Systems Report

Kansas' State Report is available by contacting KDHE, Bureau of Water, Public Water Supply Section, Forbes Field, Building 283, Topeka, KS 66620, or by accessing the web site at www.kdhe.state.ks.us.

Telephone: (785) 296-5500

State of Kentucky 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	41	16			2,725	87
Total Coliform Rule	16	15			137	37
Surface Water Treatment Rule			19	11	71	39
Lead and Copper Rule			0	0	9	9

Total Number of Regulated Systems	684
Total Number of Systems in Violation	353
Total Number of Violations	3,018

Where to Obtain the 1999 Annual State Public Water Systems Report

Kentucky's State Report is available by contacting the Kentucky Division of Water, Drinking Water Branch, 14 Reilly Road, Ash Building, Frankfort, KY, 40601, or by accessing the state's web site at water.nr.state.ky.us/dow/dwhome.htm.

Telephone: (502) 564-3410

State of Louisiana 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			0	0
Total Coliform Rule	134	119			9	9
Surface Water Treatment Rule			7	2	0	0
Lead and Copper Rule			0	0	0	0

Total Number of Regulated Systems	1,850
Total Number of Systems in Violation	134
Total Number of Violations	154*

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are

Where to Obtain the 1999 Annual State Public Water Systems Report

The Louisiana State Report is available by contacting the Office of Public Health, Engineering Services, 6867 Bluebonnet Boulevard, Suite 222, Baton Rouge, LA, 70810.

Fax: (225) 765-5040

State of Maine 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	2	2**			362	238**
Total Coliform Rule	297	181			990	471
Surface Water Treatment Rule*			16	6	1	1
Lead and Copper Rule			20	17	23	20

* Maine's report includes SWTR MCL violations. Maine appears to be counting violations that they are not required to report in this context.

** Possibly overcounts violating systems.

Total Number of Regulated Systems	2,146
Total Number of Systems in Violation	NR
Total Number of Violations	1,711

Where to Obtain the 1999 Annual State Public Water Systems Report

Maine's State Report is available by contacting the State at Drinking Water Program, 10 State House Station, Augusta, ME 04333, or by accessing the state's web site at www.state.me.us/dhs/eng/water/water.htm.

Telephone: (207) 287-2070

State of Maryland 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	28	21*			58	42
Total Coliform Rule	269	232			94	55
Surface Water Treatment Rule			10	9	0	0
Lead and Copper Rule			1	1	31	31

* Possibly overcounts violating systems.

Total Number of Regulated Systems	3,823
Total Number of Systems in Violation	NR
Total Number of Violations	491

Where to Obtain the 1999 Annual State Public Water Systems Report

Maryland's State Report and additional information on the Maryland program are available by contacting Nancy Reilman, MDE, Water Supply Program at (410) 631-3729.

State of Massachusetts 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	5	5			1,979	200
Total Coliform Rule	108	91			295	152
Surface Water Treatment Rule			54	54	3	3
Lead and Copper Rule			29	29	60	55

Total Number of Regulated Systems	1,607
Total Number of Systems in Violation	476
Total Number of Violations	2,533

Where to Obtain the 1999 Annual State Public Water Systems Report

The Massachusetts report is available on the state's web site at www.state.ma.us/dep/brp/dws/dwspubs.htm. Hard copies are available at each of the four Massachusetts DEP regional offices:

Western — 436 Dwight Street, Springfield, MA 01103
 Central — 627 Main Street, Worcester, MA 01608
 Northeast — 205A Lowell Street, Wilmington, MA 01887
 Southeast — 20 Riverside Drive, Lakeville, MA 02347

State of Michigan 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	13	13			1,289	1,038
Total Coliform Rule	492	453			2,471	1,943
Surface Water Treatment Rule			1	1	0	0
Lead and Copper Rule			1	1	133	129

Total Number of Regulated Systems	~12,456
Total Number of Systems in Violation	NR
Total Number of Violations	4,400

Where to Obtain the 1999 Annual State Public Water Systems Report

Michigan's State Report is available by contacting the state at Michigan Department of Environmental Quality, Drinking Water and Radiological Protection Division, 3423 North Martin Luther King, Jr. Boulevard, P.O. Box 30630, Lansing, MI 48909-8130, or by accessing the Michigan Department of Environmental Quality, Drinking Water and Radiological Protection Division web site at www.deq.state.mi.us/us/dwr/.

State of Minnesota 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	40	40			7	7
Total Coliform Rule	269	267			83	67
Surface Water Treatment Rule			36	22	0	0
Lead and Copper Rule			0	0	27	27

Total Number of Regulated Systems	8,950
Total Number of Systems in Violation	NR
Total Number of Violations	462

Where to Obtain the 1999 Annual State Public Water Systems Report

Minnesota's State Report is available by contacting the Drinking Water Protection Section, Minnesota Department of Health, Box 64975, St. Paul, MN 55164-0975, or by accessing the web site at www.health.state.mn.us/divs/eh/dwp/pws/dwpreport99.html.

State of Mississippi 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	1	1			17	17
Total Coliform Rule	65	57			43*	33*
Surface Water Treatment Rule			NR	NR	0	0
Lead and Copper Rule			NR	NR	0	0

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown

Total Number of Regulated Systems	1,479
Total Number of Systems in Violation	100
Total Number of Violations	126

Where to Obtain the 1999 Annual State Public Water Systems Report

Mississippi's State Report is available by contacting the Mississippi State Department of Health, Water Supply Division, P.O. Box 1700, Jackson, MS 39215-1700, or by accessing the state's web site at www.msdh.state.ms.us/OHR/watersup/wshome.htm.

State of Missouri 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	12	10			519	119
Total Coliform Rule	430*	351			1,006	587
Surface Water Treatment Rule			20	14	0	0
Lead and Copper Rule			0	0	57	57

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	2,734
Total Number of Systems in Violation	NR
Total Number of Violations	2,044

Where to Obtain the 1999 Annual State Public Water Systems Report

Missouri’s State Report and additional information regarding Missouri’s PWSs are available by contacting the Missouri Department of Natural Resources, Public Drinking Water Program, P.O. Box 176, Jefferson City, MO 65102, or by accessing the web site at www.dnr.state.mo.us/deq/pdwp/homepdwp.htm.

Telephone: (573) 751-5331 or 1-800-361-4827

State of Montana 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	4	4			625	625*
Total Coliform Rule	153	151			902	570
Surface Water Treatment Rule			43	8	70	18
Lead and Copper Rule			109	109	339	148

* Possibly overcounts violating systems.

Total Number of Regulated Systems	2,020
Total Number of Systems in Violation	NR
Total Number of Violations	2,245

Where to Obtain the 1999 Annual State Public Water Systems Report

Montana's State Report is available by contacting the Public Water Supply Section, Community Services Bureau, Permitting and Compliance Division, Montana Department of Environmental Quality, Box 200901, Helena, MT 59624-0901.

Telephone: (406) 444-4400

State of Nebraska 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	87	53			38	36
Total Coliform Rule	408	284			267	200
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	9	9

Total Number of Regulated Systems	1,335
Total Number of Systems in Violation	NR
Total Number of Violations	809

Where to Obtain the 1999 Annual State Public Water Systems Report

Nebraska's State Report is available by contacting the Nebraska Department of Health and Human Services, Regulation and Licensure, 301 Centennial Mall South, P.O. Box 95007, Lincoln, NE 68509, or by accessing the state's web site at www.hhs.state.ne.us/enh/enhindex.htm.

Telephone: (402) 471-2541
 Fax: (402) 471-6436
 TDD: (402) 471-9570

State of Nevada 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	7	7			609	73
Total Coliform Rule	89	71			226	224
Surface Water Treatment Rule			10	10	NR	NR
Lead and Copper Rule			NR	NR	136	136

Total Number of Regulated Systems	670
Total Number of Systems in Violation	NR
Total Number of Violations	1,077

Where to Obtain the 1999 Annual State Public Water Systems Report

Nevada's State Report is available from the Nevada State Health Division, 1179 Fairview Drive, Suite 101, Carson City, NV 89701.

State of New Hampshire 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	2	2			820*	74
Total Coliform Rule	173	122			213	158
Surface Water Treatment Rule			3	3	5	1
Lead and Copper Rule			0	0	2*	2*

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	2,207
Total Number of Systems in Violation	NR
Total Number of Violations	1,218

Where to Obtain the 1999 Annual State Public Water Systems Report

New Hampshire's State Report is available by contacting the NH Department of Environmental Services, Water Division, Water Supply Engineering Bureau, 6 Hazen Drive, P.O. Box 95, Concord, NH 03301, or by accessing the web site www.des.nh.state.us/wseb.

Telephone: (603) 271-2954

E-mail: 1_cullerot@des.state.nh.us

State of New Jersey 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	57	50*			14,388	776*
Total Coliform Rule	225	145			1,468	859
Surface Water Treatment Rule			9	5	4	4
Lead and Copper Rule			1	1	164**	128**

* Possibly overcounts violating systems.

**The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	4,423
Total Number of Systems in Violation	NR
Total Number of Violations	16,316

Where to Obtain the 1999 Annual State Public Water Systems Report

New Jersey's State Report is distributed through the state library system.

State of New Mexico 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	3	3			1	1
Total Coliform Rule	147	118			149	120
Surface Water Treatment Rule			6	5	0	0
Lead and Copper Rule			0	0	14	14

Total Number of Regulated Systems	1,347
Total Number of Systems in Violation	230
Total Number of Violations	320

Where to Obtain the 1999 Annual State Public Water Systems Report

A specific source for obtaining a copy of this report has not been provided. General information on its availability may be obtained from Keith Melton, Program Manager, Drinking Water Program, New Mexico Environment Department, 525 Camino De Los Marquez, Suite 4, P.O. Box 26110, Santa Fe, NM 87502.

Telephone: (505) 827-7536

E-mail: keith_melton@nmev.state.nm.us

State of New York 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	46	9*			0	0
Total Coliform Rule	43	43			0	0
Surface Water Treatment Rule			139	124	0	0
Lead and Copper Rule			36	36	9	9

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	11,617
Total Number of Systems in Violation	NR
Total Number of Violations	273

Where to Obtain the 1999 Annual State Public Water Systems Report

New York's State Report is available by contacting the state at BPWSP — NYSDOH, Flanigan Square, 547 River Street, Room 400, Troy, NY 12180-2216, or by accessing the web site at bpwsp@health.state.ny.us.

Inside New York: 1-800-458-1158, ext. 27650

Outside New York: (518) 402-7650

State of North Carolina 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	29*	22*			4,146	2,315
Total Coliform Rule	386	322			7,507	3,745
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	31	31

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	7,193
Total Number of Systems in Violation	NR
Total Number of Violations	12,099

Where to Obtain the 1999 Annual State Public Water Systems Report

North Carolina’s State Report is available by contacting the North Carolina Public Water Supply Section web site at www.deh.enr.state.nc.us/pws.

State of North Dakota 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	3	3			22	2
Total Coliform Rule	39	25			92	71
Surface Water Treatment Rule			1	1	0	0
Lead and Copper Rule			0	0	2	2

Total Number of Regulated Systems	574
Total Number of Systems in Violation	113
Total Number of Violations	159*

* Although North Dakota reported 168 total violations, this included nine minor monitoring violations.

Where to Obtain the 1999 Annual State Public Water Systems Report

North Dakota's State Report is available by contacting the North Dakota Department of Health, Division of Municipal Facilities, P.O. Box 5520, 1200 Missouri Avenue, Bismarck, ND 58506-5520, Attention: Jeni Walsh.

Telephone: (701) 328-5231

Fax: (701) 328-5200

E-mail: jwalsh@state.nd.us

Northern Mariana Islands 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			0	0
Total Coliform Rule	0	0			0	0
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	0	0

Total Number of Regulated Systems	43
Total Number of Systems in Violation	0
Total Number of Violations	0

Where to Obtain the 1999 Annual State Public Water Systems Report

The Northern Mariana Islands did not publish an Annual Report. EPA generated data from SDWIS/FED.

State of Ohio 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	15	10			3,210	678
Total Coliform Rule	1,030	687			1,799	1,232
Surface Water Treatment Rule			166	31	3	1
Lead and Copper Rule			11	11	141	127

Total Number of Regulated Systems	5,901
Total Number of Systems in Violation	2,024
Total Number of Violations	6,375

Where to Obtain the 1999 Annual State Public Water Systems Report

A summary of Ohio's State Report is available by contacting the State of Ohio at PWS Annual Compliance Report, Ohio EPA — DDAGW, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049, or by accessing the Ohio EPA's web site at www.epa.state.oh.us/ddagw/annualreports.html. An additional contact is David Greenwood, Central District Office, 3232 Alum Creek Drive, Columbus, OH 43207.

Telephone: (614) 728-3778

State of Oklahoma 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	36	33			0	0
Total Coliform Rule	90	79			399	221
Surface Water Treatment Rule			52	34	16	10
Lead and Copper Rule			50	48	122	122

Total Number of Regulated Systems	1,717
Total Number of Systems in Violation	NR
Total Number of Violations	765

Where to Obtain the 1999 Annual State Public Water Systems Report

Oklahoma’s State Report is available by contacting the state at Oklahoma Department of Environmental Quality, Water Quality Division, 8th Floor, 707 North Robinson, Oklahoma City, OK, or by mail request at the Department of Environmental Quality, Water Quality Division, P.O. Box 1677, Oklahoma City, OK 73101-1677, or by accessing the web site at www.deq.state.ok.us/water1/home/index.html.

State of Oregon 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	6	6			745	742
Total Coliform Rule	165	134			1,845	1,012
Surface Water Treatment Rule			122	53	200	66
Lead and Copper Rule			81	81	121	93

Total Number of Regulated Systems	2,699
Total Number of Systems in Violation	1,590
Total Number of Violations	3,285

Where to Obtain the 1999 Annual State Public Water Systems Report

Oregon's State Report is available by contacting Diane Weis at the Oregon Health Division, 800 NE Oregon Street, Portland, OR 97232, or by accessing the Oregon drinking water web site at www.ohd.hr.state.or.us/cehs/dwp.

State of Pennsylvania 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	122	85			4,011	529
Total Coliform Rule	342	246			1,320	943
Surface Water Treatment Rule			113	18	179	42
Lead and Copper Rule			6	6	64	55

Total Number of Regulated Systems	10,500
Total Number of Systems in Violation	1,591
Total Number of Violations	6,157

Where to Obtain the 1999 Annual State Public Water Systems Report

Pennsylvania’s State Report, the list of public water systems having MCL violations during 1999, and additional information about the Pennsylvania Safe Drinking Water Program are available by contacting the Department of Environmental Protection, Bureau of Water Supply Management, P.O. Box 8467, 11th Floor RCSOB, Harrisburg, PA 17105-8467, or by accessing the web site at www.dep.state.pa.us.

Telephone: (717) 787-5017

Puerto Rico 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	8	5			1,316	710
Total Coliform Rule	987	385			280	152
Surface Water Treatment Rule			423	187	1,226	136
Lead and Copper Rule			1	1	52	34

Total Number of Regulated Systems	NR
Total Number of Systems in Violation	NR
Total Number of Violations	4,293

Where to Obtain the 1999 Annual State Public Water Systems Report

Puerto Rico's Report is available at the following addresses:

Department of Health
 Public Water Supply Supervision Program
 Ramon Fernandez Marina Hospital — Third Floor
 Bo. Monacillos, Rio Piedras, Puerto Rico

Department of Health
 Public Water Supply Supervision Program
 P.O. Box 70184 Rio Piedras, Puerto Rico 00936
 Telephone: (787) 754-6010 or (787) 754-6370

State of Rhode Island 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	2	2			2	2
Total Coliform Rule	23	17			3	2
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			2	2	0	0

Total Number of Regulated Systems	481
Total Number of Systems in Violation	24
Total Number of Violations	32

Where to Obtain the 1999 Annual State Public Water Systems Report

Additional information about Rhode Island’s drinking water program is available by contacting the Rhode Island Department of Health, Office of Drinking Water Quality, 3 Capitol Hill, Room 209, Providence, RI 02908, or by accessing the state’s web site at www.health.state.ri.us.

Telephone: (401) 222-6867

State of South Carolina 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	17	14			0	0
Total Coliform Rule	125	95			155	85
Surface Water Treatment Rule			8	8	2	1*
Lead and Copper Rule			8	8	39	38

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	1,639
Total Number of Systems in Violation	225
Total Number of Violations	354

Where to Obtain the 1999 Annual State Public Water Systems Report

South Carolina's State Reports are available by contacting the Water Enforcement Division with SCDHEC's Bureau of Water at 2600 Bull Street, Columbia, SC, 29201, or by accessing the Bureau of Water web site at www.state.sc.us/dhec/eqc/water. For additional information not contained here, call the Freedom of Information Office at (803) 898-3880.

Telephone: (803) 898-4154

Fax: (803) 898-3795

E-mail: bleaubp@columb32.dhec.state.sc.us

State of South Dakota 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	14	7			645	53*
Total Coliform Rule	85	61			189	117
Surface Water Treatment Rule			7	1	0	0
Lead and Copper Rule			8	8	42	39

* Possibly overcounts violating systems.

Total Number of Regulated Systems	725
Total Number of Systems in Violation	NR
Total Number of Violations	990

Where to Obtain the 1999 Annual State Public Water Systems Report

South Dakota's State Report is available by contacting the state at DENR, Drinking Water Program, 523 E. Capitol St., Pierre, SD 57501-3181.

State of Tennessee 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			396	55*
Total Coliform Rule	72	65			287	194
Surface Water Treatment Rule			60	10	15	4
Lead and Copper Rule			0	0	3	3

* Possibly overcounts violating systems.

Total Number of Regulated Systems	1,192
Total Number of Systems in Violation	NR
Total Number of Violations	833

Where to Obtain the 1999 Annual State Public Water Systems Report

Tennessee's State Report is available by contacting the Division Water Supply Central Office at Division of Water Supply — Central Office, 401 Church Street, 6th Floor, L&C Tower, Nashville, TN 37423-1549, phone (615) 532-0152; or any of the six field offices: Division of Water Supply, Suite 550 — State Office Building, 540 McCallie Avenue, Chattanooga, TN 37402-2013, phone (888) 891-8332; Division of Water Supply, 121 South Willow, Cookeville, TN 38502; Division of Water Supply, 362 Carriage House Drive, Jackson, TN 38305-2222; Division of Water Supply, 2305 Silverdale Road, Johnson City, TN 37601-2162; Division of Water Supply, Suite 220-State Plaza, 2700 Middlebrook Pike, Knoxville, TN 37219; Division of Water Supply, 537 Brick Church Park Drive, Nashville, TN 37243-1550. Copies of Tennessee's State Report are also located in most public libraries in Tennessee, or by accessing the web site at www.state.tn.us/environment/dws/index.html.

State of Texas 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	172	159			0	0
Total Coliform Rule	146	134			370	287
Surface Water Treatment Rule			56	13	211	33
Lead and Copper Rule			15	15	80	80

Total Number of Regulated Systems	6,696
Total Number of Systems in Violation	NR
Total Number of Violations	1,050

Where to Obtain the 1999 Annual State Public Water Systems Report

A specific source for obtaining a copy of this report has not been provided. General information on its availability may be obtained from the Water Utilities Division, Texas Natural Resource Conservation Commission, P.O. Box 13087, Austin, TX 78711-3087.

Telephone: (512) 239-6020

State of Utah 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			4,591	3,234
Total Coliform Rule	130	90			322	203
Surface Water Treatment Rule			15	4	8	2
Lead and Copper Rule			0	0	81	81

Total Number of Regulated Systems	NR
Total Number of Systems in Violation	NR
Total Number of Violations	5,147

Where to Obtain the 1999 Annual State Public Water Systems Report

Utah's State Report is available by contacting the state at Utah Division of Drinking Water, P.O. Box 144830, Salt Lake City, UT 84114-4830, Attention: Ken Bousfield.

Telephone: (801) 536-4207

State of Vermont 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	4	3			247	225**
Total Coliform Rule	90	75			340	271
Surface Water Treatment Rule			8	8	31	12
Lead and Copper Rule			8	8	51*	41

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

** Possibly overcounts violating systems.

Total Number of Regulated Systems	1,337
Total Number of Systems in Violation	NR
Total Number of Violations	779

Where to Obtain the 1999 Annual State Public Water Systems Report

Vermont's State Report is available by contacting the State Water Supply Division, 103 S. Main Street, Waterbury, VT 05671-0403.

Telephone: (802) 241-3400

In Vermont: (800) 823-6500

Virgin Islands 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	6*	1*			208	208
Total Coliform Rule	111	89			85	55
Surface Water Treatment Rule			NR	NR	NR	NR
Lead and Copper Rule			0	0	66*	66*

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

Total Number of Regulated Systems	460
Total Number of Systems in Violation	NR
Total Number of Violations	476

Where to Obtain the 1999 Annual State Public Water Systems Report

The Virgin Islands Report can be obtained by contacting the DPNR, Division of Environmental Protection, 1118 Water Gut Homes, Christiansted, St. Croix, US Virgin Islands, 00820. The report is also available at public libraries, University of Virgin Islands Public Library, UVI's Water Resource Research Institute, and local libraries.

State of Virginia 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	6	6			8	8
Total Coliform Rule	227	171			423	254
Surface Water Treatment Rule			101	23	8	1
Lead and Copper Rule			127	126	138	137

Total Number of Regulated Systems	3,870
Total Number of Systems in Violation	NR
Total Number of Violations	1,038

Where to Obtain the 1999 Annual State Public Water Systems Report

A complete copy of the report may be obtained by contacting one of the six field offices: Office of Water Programs, Abingdon Field Office — Field 1, 454 East Main Street, Abingdon, VA 24210, phone (540) 676-5650 and fax (540) 676-5659; Office of Water Programs, Lexington Field Office — Field 2, 131 Walker Street, Lexington, VA 24450, phone (540) 463-7136 and fax (540) 463-3892; Office of Water Programs, Southeast Virginia Field Office — Field 3, 5700 Thurston Avenue — Suite 203, Virginia Beach, VA 23455, phone (757) 363-3876 and fax (757) 363-3955; Office of Water Programs, East Central Field Office — Field 4, 300 Turner Road, Richmond, VA 23225, phone (804) 674-2880 and fax (804) 674-2815; Office of Water Programs, Danville Field Office — Field 5, 1347 Piney Forest Road, Danville, VA 24540, phone (804) 836-8416 and fax (804) 836-8424; Office of Water Programs, Culpeper Field Office — Field 6, 400 South Main Street — 2nd Floor, Culpeper, VA 22701-3318, phone (540) 829-7340 and fax (540) 829-7337. A summary of Virginia’s state report is available by accessing the state’s web site at www.vdh.state.va.us.

State of Washington 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	0	0			0	0
Total Coliform Rule	480	361			1,866	1,003
Surface Water Treatment Rule			145	63	84	18
Lead and Copper Rule			14	14	1,361	1,355

Total Number of Regulated Systems	4,285
Total Number of Systems in Violation	2,287
Total Number of Violations	3,950

Where to Obtain the 1999 Annual State Public Water Systems Report

Washington's State Report is available by contacting the Department of Health, Division of Drinking Water, P.O. Box 47822, Olympia, WA 98504-7822, or by accessing the state's web site at www.doh.wa.gov/ehp/dw/enflink.htm or web site www.doh.wa.gov/ehp/dw/enflink2.htm.

State of West Virginia 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	6	4			265	157
Total Coliform Rule	84	65			1,038	488
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			0	0	82	52

Total Number of Regulated Systems	1,411
Total Number of Systems in Violation	580
Total Number of Violations	3,131*

The state report lists the total number of violations as 3,131, while the individual category numbers given (show above) total 1,475.

Where to Obtain the 1999 Annual State Public Water Systems Report

West Virginia did not provide a specific source for obtaining a copy of its report. For more information, contact the West Virginia Bureau for Public Health, Office of Environmental Health Services, 815 Quarrier Street, Suite 418, Charleston, WV, 25301-2616.

Telephone: (304) 558-2981

State of Wisconsin 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	53	37			624	597
Total Coliform Rule	NR	545			NR	829
Surface Water Treatment Rule			0	0	0	0
Lead and Copper Rule			13	13	62	31

Total Number of Regulated Systems	11,760
Total Number of Systems in Violation	2,052
Total Number of Violations	752

Where to Obtain the 1999 Annual State Public Water Systems Report

Wisconsin's State Report is available by contacting the Bureau of Drinking Water and Groundwater, State of Wisconsin Department of Natural Resources, P.O. Box 7921, Madison, WI 53707.

Telephone: (608) 266-6669

State of Wyoming 1999 PWS Compliance Report

Violations for 1999

Violations Category	MCL		Treatment Technique		Significant Monitoring	
	Violations	Systems in Violation	Violations	Systems in Violation	Violations	Systems in Violation
Chemical Contaminant Group	4	4			1,077	74**
Total Coliform Rule	52	42			141	108
Surface Water Treatment Rule			3	3	5	5
Lead and Copper Rule			0	0	20*	19

*The state report gives different counts in the text of the report and in the accompanying tables. Counts from the text of the report are shown here.

** Possibly overcounts violating systems.

Total Number of Regulated Systems	733
Total Number of Systems in Violation	NR
Total Number of Violations	1,302

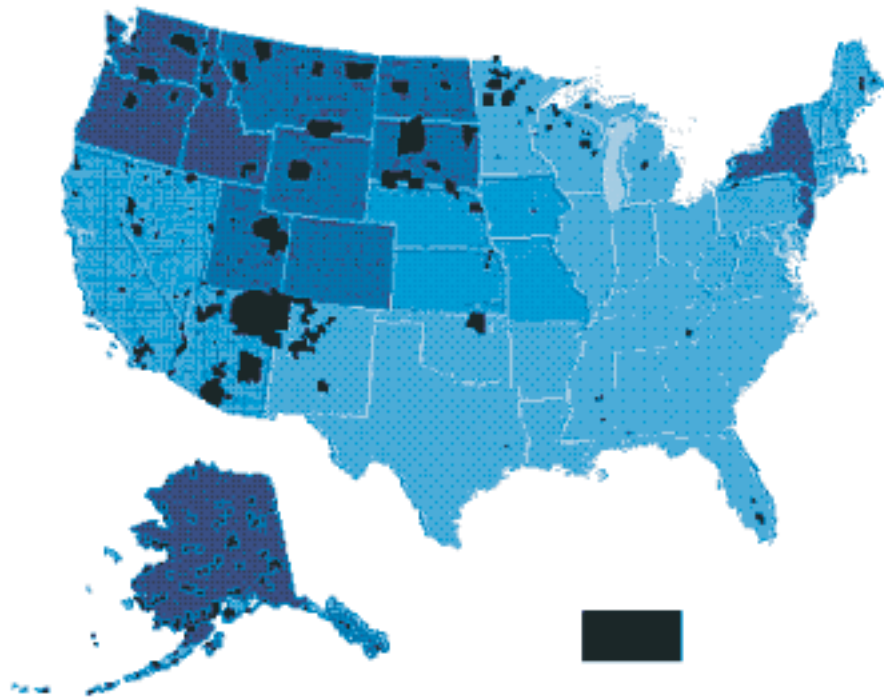
Where to Obtain the 1999 Annual State Public Water Systems Report

The report for the state of Wyoming is available by contacting John Gillis, EPA Region 8, 999 18th Street, Suite 500, Denver, CO 80202-2466.

Telephone: (303) 312-6229

Appendix C

Map of Indian Lands



1999 National Summary of Compliance for Public Water Systems in Indian Country

INTRODUCTION

This section of the 1999 National Public Water Systems Compliance Report describes how the Environmental Protection Agency (EPA) and federally-recognized Indian tribes (tribes) are meeting the goal of ensuring that public water systems in Indian country provide safe drinking water.

PUBLIC WATER SYSTEMS ON INDIAN RESERVATIONS

Tribes may apply for eligibility to receive primary enforcement responsibility (known as primacy) to administer the drinking water program provided they meet the requirements of Sections 1413 and 1451 of the Safe Drinking Water Act (SDWA). As of 1999, only the Navajo Nation has received primacy. EPA, therefore, administers the drinking water program in Indian country, including on Indian reservations.

A glossary of terms used in this report appears in Appendix A. A map of the areas covered by this report appears in Appendix C.

PUBLIC WATER SYSTEMS IN ALASKA AND OKLAHOMA

Compliance figures for Alaska Native Villages and tribes in Oklahoma are not included in this section of the report; they can be found in the Alaska and Oklahoma state reports. In addition, it is possible that some other tribal systems are not included in this section; they can also be found in other state reports. The state reports do not, however, contain separate information on tribal public water systems. As a result, comprehensive information on these systems is not covered in either the tribal or state section of the report.

EPA plans to review whether information on public water systems serving Alaska Native Villages and tribes in Oklahoma, as well as any other tribal systems not currently addressed in

this section of the report, should continue to be included in state reports. EPA intends to address this issue in the next report.

DATA QUALITY

This report uses information from the Safe Drinking Water Information System/Federal Version (SDWIS/FED). SDWIS/FED is the national database where EPA records information on public water systems in Indian country. Public water systems in Indian country are required to report laboratory data to EPA. EPA uses the information to determine compliance with the national primary drinking water regulations of SDWA.

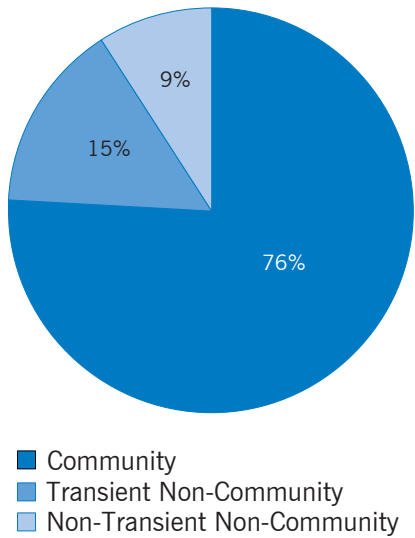
This report also discusses the limitations in the data EPA uses to measure its success and the steps it is taking to increase data reliability and completeness. The report also discusses the Agency's compliance assistance, enforcement, and financial assistance programs. EPA plans to continue its data quality efforts during 2000 to ensure that SDWIS/FED contains complete and accurate information.

FINDINGS

In 1999, 981 public water systems in Indian country served approximately 513,719 users.

- 748 community water systems served more than 410,385 people in their primary residences.
- 91 non-transient non-community systems (schools and factories) served a constantly changing audience of more than 30,509 people.
- 142 transient non-community systems (campgrounds and highway rest stops) served more than 72,825 people who passed through.

Percentage of Systems by Type

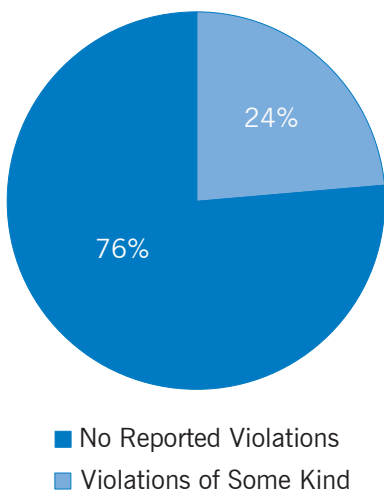


Almost all public water systems in Indian country were small. These small systems provide drinking water to the majority of the public who drank water on Indian reservations.

- 98% of public water systems in Indian country serve 3,300 or fewer people. These 957 small systems served 66% of the people who received water from public water systems on Indian reservations.

SDWIS/FED records no violations for most public water systems in Indian country.

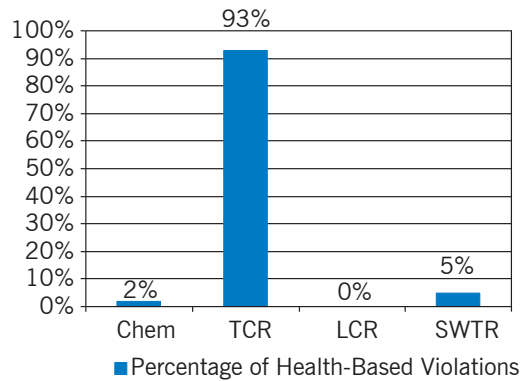
Systems with Violations



- 750 of 981 public water systems had no reported health-based or significant reporting violations.

95% of public water systems in Indian country reported no violations of a health-based drinking water standard in 1999.

Percentage of Health-Based Violations by Rule

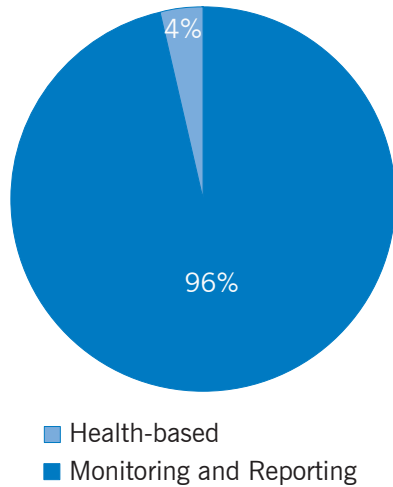


- 88 health-based violations in Indian country were reported to SDWIS/FED in 1999. The Maximum Contaminant Level (MCL) for the Total Coliform Rule was the health-based standard most frequently violated.

The vast majority of violations reported to SDWIS/FED in 1999 were for a public water system's significant failure to monitor and report, rather than for a health-based MCL or a treatment technique violation detected and reported.

- Of the 2,480 violations reported to SDWIS/FED in 1999, 2,392 (96%) were significant violations of monitoring and reporting requirements. If a system did not monitor the quality of its water, it is impossible to know if it has violated health-based requirements.
- Public water systems in Indian country represent 0.6% of all public water systems in the United States but were responsible for 3.0% of all monitoring and reporting violations at public water systems reported to SDWIS/FED in 1999.

Type of Violation



COMPLIANCE ASSISTANCE AND ENFORCEMENT

EPA uses multiple approaches to ensure public water systems in Indian country comply with SDWA regulations.

EPA's tribal compliance assistance program is designed to help maintain compliance with SDWA by building cooperative working relationships with utility managers, operators, other tribal environmental staff, and tribal elected officials. The program emphasizes information exchanges, operation assistance, and water quality monitoring.

EPA gives information and assistance directly to tribal public water system operators, utility managers, and owners through training sessions, newsletters, telephone support, and system visits. On-site technical assistance is provided by engineers and qualified staff who work with tribes to assess current compliance status, develop monitoring schedules and compliance plans, and conduct sanitary surveys. EPA coordinates many of these activities with other federal agencies, including the Indian Health Service and the Bureau of Reclamation. Coordination also occurs with non-governmental organizations and inter-tribal consortia, including the Native American Water Association, the Rural Water Association, and the Rural Community Assistance Corporation.

EPA is also responsible for initiating enforcement actions against owners or operators of public

water systems in Indian country if a system is not in compliance with SDWA. In most cases, EPA relies on compliance assistance and informal enforcement actions to facilitate a tribally owned or managed public water system's return to compliance. When a formal enforcement action is appropriate, EPA can initiate administrative orders, including emergency administrative orders, and refer civil and criminal cases to the Department of Justice. The "EPA Policy for the Administration of Environmental Programs on Indian Reservations" (EPA Indian Policy) guides the Agency's approach to bringing civil administrative or judicial enforcement actions against systems owned or managed by tribal governments.

Public water systems are required to monitor for 89 different contaminants and conduct analyses using a variety of EPA-approved analytical methods. Where a system fails to perform some or all of the required monitoring, a separate monitoring and reporting violation is recorded for each missed contaminant.

Table 1 shows the number of compliance assistance and enforcement activities directed toward public water systems in Indian country. The information is drawn both from SDWIS/FED and separate records maintained by some EPA Regions. EPA Regions are only required to report to SDWIS/FED on violations and formal enforcement actions related to the resolution of violations of SDWA; these data are, however, currently incomplete. Some EPA Regions maintain separate records that contain information on both formal and informal enforcement actions and compliance assistance activities.

FINANCIAL ASSISTANCE

EPA provides financial assistance to public water systems in Indian country to help build tribal capacity to operate and maintain systems in compliance with SDWA. Capacity building is a long-term solution which focuses on giving tribes grants, training, and technical assistance as they develop their environmental programs. EPA's own General Assistance Program builds tribal capacity by providing grants to develop core environmental activities, including drinking water programs.

**TABLE 1: NUMBER OF PUBLIC WATER SYSTEMS
ON TRIBAL LANDS WITH VIOLATIONS BY RULE**

PUBLIC WATER SYSTEMS AND VIOLATIONS	
Total Number of Public Water Systems	981
Total Number of Public Water Systems with Violations	231
Total Number of Violations	2,480

COMPLIANCE AND ENFORCEMENT ACTIVITY	SDWIS/FED	SUPPLEMENTAL
Federal Administrative Order issued	1	1
Federal Compliance Achieved	0	0
Federal 1431 (Emergency) Order	0	1
Federal Voluntary Reminder Notice	157	327
Federal Compliance Meeting Conducted	7	499
Federal Technical Assistance Visit	16	502
Federal Site Visit (including sanitary surveys)	0	120
Federal Public Notification Requested	1	10
Federal Public Notification Issued	1	2
Federal Public Notification Received	43	15
Federal Boil Water Order	7	15

EPA also distributes funds for specific drinking water program priorities. About \$2.7 million (3% of the set-aside of public water systems appropriations) was allotted for implementing the Tribal Public Water System Supervision Program in fiscal year 1998. Through this program, EPA awarded a number of grants to tribes and tribal organizations to address various aspects of the drinking water program.

In addition to the 3% set-aside, EPA received \$3.8 million in fiscal years 1998 and 1999 for drinking water needs on Indian lands. EPA is focusing on activities such as:

- Tribal Public Water System Supervision Program primacy workshops to provide general outreach material to all tribes eligible to pursue primary enforcement responsibility;
- capacity development projects;

- source water and wellhead protection projects;
- development of a voluntary operator certification program for tribes; and
- provision of operator training and certification to tribal operators.

In the 1996 Amendments to SDWA, an infrastructure funding program was established to improve water supplies. Each year, 1.5% of the appropriation for the national Drinking Water State Revolving Fund program is set aside for American Indian communities and Alaska Native Villages. The initial set-aside from the 1997 appropriation amounted to \$19.25 million, an additional \$10.87 million was set-aside from the 1998 appropriation, and \$11.625 million was set-aside from the 1999 appropriation. In 1998, EPA provided approximately \$7 million to the

state of Alaska to target drinking water infrastructure improvement for rural and Native villages. A small portion of these funds was used to support technical assistance and training. Furthermore, EPA funds tribal multi-media compliance and enforcement programs, including drinking water system activities.

Finally, technical assistance and training for small tribally owned or operated public water systems are also provided. For example, EPA currently has two cooperative agreements with the National Rural Water Association to provide support to small public water systems, including those owned or operated by tribes.

CONCLUSIONS AND RECOMMENDATIONS

In 1999, EPA Regions reported that 76% of the public water systems in Indian country did not report a violation of a health-based standard or a significant reporting violation. This represents an overall increase from 1998 when 72% of facilities did not report a violation of a health-based standard or a significant reporting violation.

During 1999, there was a noticeable decrease in the total number of significant violations of monitoring and reporting requirements in Indian country from 3,897 in 1998 to 2,392 in 1999. This decrease, however, resulted from the fact that systems determine compliance with many chemical contaminants on a three year cycle. Reports for those contaminants were due in 1998, with the result that monitoring and reporting violations in that year increased dramatically. 1999 was the first year of another three year cycle. With fewer reports due in 1999, there were fewer monitoring and reporting violations.¹

EPA continues to implement two primary recommendations from the 1996 and 1997 reports: (1) improve collection and maintenance of compliance data for public water systems in Indian country; and (2) place a priority on decreasing the number of monitoring and reporting violations to gain a full understanding of whether health-based violations exist. EPA will accomplish these recommendations by:

- continuing to work cooperatively with tribal governments and their utility managers and water system operators to improve compliance with monitoring and reporting requirements and with health-based standards, particularly the Total Coliform Rule and Surface Treatment Water Rule;
- increasing EPA's field presence, conducting more frequent sanitary surveys, and engaging in targeted technical and compliance assistance and enforcement;
- improving the inventory of public water systems in Indian country;
- improving the collection and entry into SDWIS/FED of compliance and enforcement information in a timely manner to avoid keeping multiple records;
- continuing to support and encourage capital improvements for public water systems to improve the infrastructure (and therefore compliance with SDWA requirements) of public water systems in Indian country, including grants provided under the Drinking Water Tribal Infrastructure Improvement Program; and
- focusing on small system compliance issues and the development of small system capacity.

Ultimately, EPA will continue to respond to compliance and enforcement issues at public water systems owned or managed by tribal governments in a manner consistent with SDWA and the EPA Indian Policy. As such, EPA will usually emphasize compliance assistance as the first step in returning these systems to compliance. Where compliance assistance is ineffective and where, among other things, there is a significant threat to human health or the environment, EPA will take appropriate steps to return systems to compliance, including formal enforcement actions.

¹ Systems must monitor for most chemical contaminants one time within a standard three-year compliance period.

1999 National Summary of Public Water Systems Compliance

INTRODUCTION

The National Public Water Systems Compliance Report for 1999 describes how the Environmental Protection Agency (EPA) and its state partners are meeting the goal of ensuring that Americans receive safe drinking water from public water systems. The report also discusses the data we use to measure our success and the progress we are making in our efforts to increase its reliability and completeness.

EPA prepares a National Public Water Systems Compliance Report for every calendar year. The report is an annual summary of violations at the nation's public water systems. The report also summarizes and evaluates annual reports prepared by the states.¹

Public Water Systems

A Public Water System (PWS) is 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 fifteen service connections or regularly serves at least 25 individuals at least 60 days out of the year. A public water system can be one of three types:

- **Community Systems (CWS)** serve at least 15 service connections or 25 people year-round in their primary residences.
- **Non-transient Non-community Systems (NTNCWS)** serve at least 25 of the same persons over six months per year (e.g., schools or factories that have their own water source).
- **Transient Non-community Systems (TNCWS)** serve at least 25 persons (but not the same 25) over six months per year (e.g., campgrounds or highway rest stops that have their own water source).

The first part of this report draws information from the Safe Drinking Water Information System/Federal Version (SDWIS/FED), EPA's national database, to provide a national picture of the maximum contaminant level, treatment technique, significant monitoring and reporting, and variance or exemption violations the states reported to EPA for 1999. EPA aggregates all reported violations at all public water systems in states, commonwealths, territories and throughout Indian country to present a national summary of all violations, all monitoring and reporting violations, and all violations of health-based standards at the different kinds of public water systems.

The second part of this report presents information on public water systems throughout Indian country.

A glossary of terms used in this report appears in Appendix A.

Summaries and evaluations of the states' annual public water systems reports for 1999 are presented in Appendix B.

PWS COMPLIANCE

This report uses information from SDWIS/FED, the national database where EPA records information the states are required to report about their public water systems. For the national public water system compliance reports, EPA examines SDWIS/FED records of violations of primary drinking water regulations that specify: 1) the maximum permissible level of a contaminant in water that is delivered to any user of a public water system (Maximum Contaminant Level or MCL); 2) techniques for treating water to make it safe; and 3) monitoring and reporting requirements (how and when water must be tested and the results reported).

¹ The term "state" includes 56 states, commonwealths, and territories. All but Wyoming and the District of Columbia have federal approval to implement the drinking water program within their jurisdictions. Federal approval to implement the drinking water program is called primary enforcement authority, or "primacy." During calendar year 1999, EPA implemented the drinking water program in Wyoming, the District of Columbia, and throughout Indian country and was responsible for reporting the violations in these jurisdictions to SDWIS/FED.

How Does The Public Find Out If Its Drinking Water Is Safe?

Information Sent to Customers:

Consumer Confidence Report — Every community water system is required to send its customers (each service connection) a yearly report identifying the contaminants detected in its water and the risks of exposure to those contaminants.

Public Notification Rule — Public water systems must notify their customers if there has been a violation of drinking water standards.

Information on the Internet:

Safewater Web Site (<http://www.epa.gov/safewater>) — provides information on the Safe Drinking Water Act, individual water systems, contaminants that may be in drinking water, and what individuals can do to help protect sources of their drinking water.

Additional Information:

Call the community water system — Billing statements should provide a number to call with questions.

State Public Water Systems Compliance Report — Each state's annual report discusses the violations at its public water systems. Most state reports include a list of violating facilities.

National Public Water Systems Compliance Report (this report) — summarizes all reported violations at America's public water systems.

Safe Drinking Water Hotline (1-800-426-4791) — answers questions about drinking water, lets callers order documents from EPA, and can refer callers to EPA experts if they need more information.

Envirofacts Web Site (<http://www.epa.gov/enviro>) — allows the public to access EPA databases containing information on environmental activities that may affect air, water, and land anywhere in the United States.

As EPA reported in its *Data Reliability Analysis of the EPA Safe Drinking Water Information System/Federal Version (SDWIS/FED)* (EPA 816-R-00-020, October 2000), the data in SDWIS/FED are generally accurate. This is particularly true of data related to the number of public water systems, their size, and their type. However, EPA's analysis revealed that many states did not report some apparent violations — either to their own data systems or to EPA's SDWIS/FED. Although states have corrected the data omissions EPA's analysis discovered, EPA and the states are engaged in further data quality efforts to ensure that all violations are identified and reported to SDWIS/FED. Because these ongoing efforts will result in significant corrections and additions to the data in SDWIS/FED, this 1999 report offers broad national findings rather than detailed analysis.

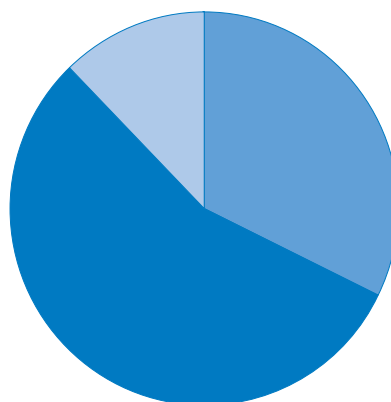
Discussions of data quality concerns and EPA's recommendations appear later in this report.

FINDINGS

In 1999, 167,564 public water systems together served 275 million users. The actual

number of individuals served was smaller, because millions of Americans drank water from, and were counted as users by more than one public water system during the course of the year.

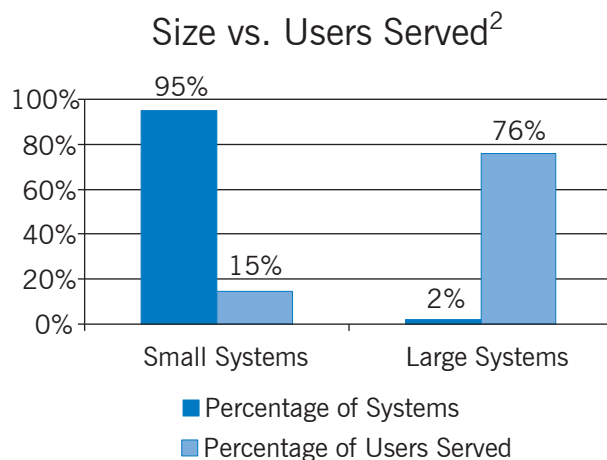
Percentage of Systems by Type



- Transient Non-Community
- Community
- Non-Transient Non-Community

- 54,101 community water systems served more than 256 million people in their primary residences.
- 20,429 non-transient non-community systems (schools, factories) served almost 7 million people in places they frequented.
- 93,034 transient non-community systems (campgrounds, highway rest stops) served a constantly changing user base of more than 12 million people.

Most public water systems were small, but large systems served a majority of the people who drank water from a public water system.

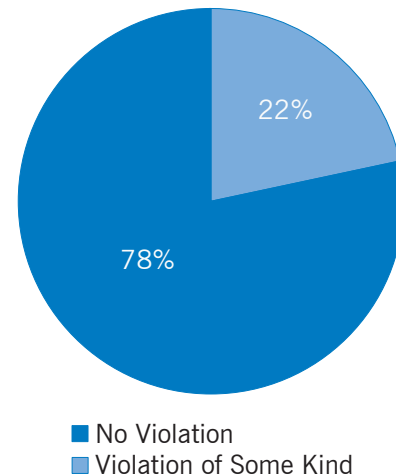


- 95% of America's public water systems (including nearly all of the transient non-community systems) served 3,300 or fewer users. Together, these 159,219 small systems provided service to 15% of all users.
- 2% of America's public water systems served more than 10,000 users. Together, these 3,744 large systems provided service to 76% of all users.

SDWIS/FED recorded no significant violations for most of America's public water systems.

- 78% of the public water systems in America collected and tested the required samples and filed the required reports without reporting a violation.

PWS with Violations



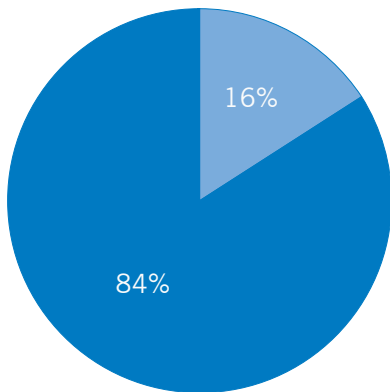
The states reported either a health-based violation or a significant monitoring and reporting violation at approximately 36,000 public water systems in 1999.

- Slightly more than 23,000 (64%) of these systems were non-community water systems, all but fifty of which served fewer than 3,300 users. Together, these violating small non-community water systems served drinking water to 3 million users.
- 91% of the approximately 13,000 community water systems with a violation served fewer than 3,300 users. Together, these violating small community water systems served drinking water to 4.5 million users.

² Because only 3% of public water systems are "medium" in size, i.e., serve between 3,301 and 10,000 users, and because only 9% of the population is served by them, this report omits discussion of "medium" systems.

Most Americans received drinking water from public water systems that recorded no significant violations in 1999.

Percentage of Users Served by PWS without Reported Significant Violation

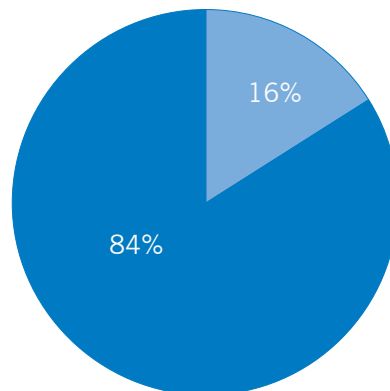


- Users Served by System without Violation
- Users Served by System with Violation

- 84% of the population served by *public water systems* received drinking water from a system that neither reported a violation of a health-based standard nor was cited for a significant violation of a monitoring and reporting requirement.
- 84% of the population served by *community water systems* received drinking water from a system that neither reported a violation of a health-based standard nor was cited for a significant violation of a monitoring and reporting requirement.

The vast majority of the 85,476 violations the states reported to SDWIS/FED in 1999 were for a public water system's significant failure to monitor and report, rather than health-based MCL or treatment technique violations detected and reported by a system.

Type of Violation

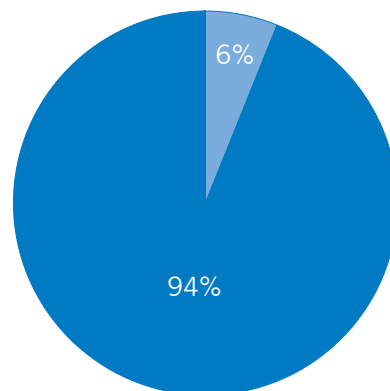


- Monitoring and Reporting
- Health-Based

- If a system did not monitor the quality of its water, it is impossible to know if it has violated a health-based requirement. For this reason, a system's significant failure to monitor and report is a major violation that must be addressed and corrected.
- 51% of the 71,410 significant monitoring and reporting violations reported by the states were violations of the monitoring and reporting requirements of the Total Coliform Rule, a rule that applies to all types and sizes of public water systems.

94% of America's public water systems reported no violations of a health-based drinking water standard in 1999.

PWS with Health-Based Violations



- Systems with Reported Health-Based Violations
- Systems with No Reported Health-Based Violations

Health-Based Violations and Illness

It is important to note that a public water system's violation of a health-based standard does not mean that the people who drank the system's water got sick. A health-based violation means either that the system has exposed its users to what EPA has judged as an unreasonable risk of illness, or that the system has failed to treat its water to the extent EPA has judged necessary to protect its users from an unreasonable risk of illness in the event that the regulated contaminant is present in source water. Many variables affect the likelihood of illness resulting from health-based violations, among them the duration of the violation, whether or not the violation occurred in an isolated section of a complex public water system, and the extent to which contamination exceeds the allowable level. While modern treatment systems have substantially reduced the incidence of waterborne disease, drinking water contamination remains a significant health risk management challenge. Studies by the Centers for Disease Control (CDC) indicate that between 1980 and 1998 there were 419 outbreaks of illness linked to contamination in drinking water resulting in an estimated 511,000 cases of disease (Craun and Calderon, 1996; Levy et al., 1998; Barwick et al., 2000). The majority of outbreaks in the U.S. occurred at surface water systems. Nearly 80% of all reported cases of illness were associated with the 1993 *Cryptosporidium* outbreak in Milwaukee, WI, which resulted in an estimated 403,000 cases (MacKenzie et al. 1994; McDonald et al. 2001).

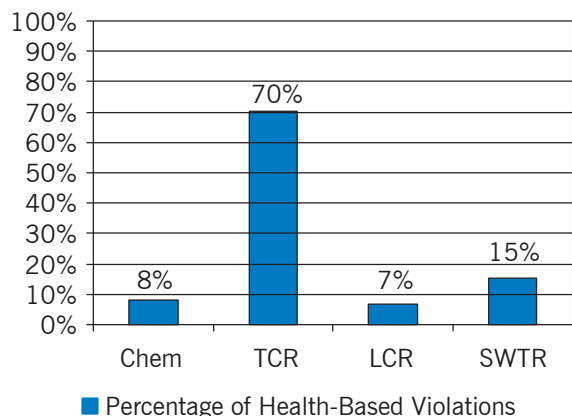
The number of waterborne disease outbreaks identified and reported in the CDC database is believed, however, to understate the actual incidence of outbreaks and cases of illness (Craun and

Calderon, 1996; National Research Council, 1997). Recognized and reported waterborne disease outbreaks are usually the result of exposure to waterborne pathogens that cause acute gastrointestinal illness with diarrhea, abdominal discomfort, nausea, and vomiting. Because such illnesses are generally of short duration in healthy people, many individuals experiencing these symptoms do not seek medical attention. Where medical attention is sought, the pathogenic agent may not be identified through routine testing. Consequently, outbreaks are often not recognized in a community or, if recognized, are not traced to a drinking water source. Moreover, an unknown but probably significant portion of waterborne disease is endemic (i.e., isolated cases not associated with an outbreak) and, thus, is even more difficult to recognize.

EPA's health-based standards are intended to provide an adequate margin of safety not just for healthy people, but also for populations that are at greater risk from waterborne disease. These sensitive subpopulations include children (especially the very young), the elderly, the malnourished, pregnant women, the disease impaired (e.g., diabetes, cystic fibrosis), and a broad category of those with compromised immune systems, such as AIDS patients, those with autoimmune disorders (e.g., rheumatoid arthritis, lupus erythematosus, multiple sclerosis), transplant recipients, and those on chemotherapy (Rose, 1997). Immunocompromised persons are more likely than healthy individuals to contract waterborne disease, the severity and duration of their illness is often greater, and they are at a greater risk of death.

The Maximum Contaminant Level for the Total Coliform Rule (TCR) is the health-based standard most frequently violated.

Percentage of Health-Based Violations by Rule



- SDWIS/FED recorded 14,066 violations of health-based standards in 1999. 70% of these violations were violations of the MCL for the Total Coliform Rule (TCR), which must be met by all types and sizes of public water systems.³

No violations of variances or exemptions were reported to SDWIS/FED during 1999.

- Under Federal law, states can grant variances or exemptions to public water systems in limited circumstances allowing them to install alternative technology or giving them more time to meet a standard if public health is adequately protected in the interim. Few public water systems were operating under a variance or exemption in 1999, and only four new variances or exemptions were granted during the year. The states did not report any violations.

EPA and its state partners continue to take enforcement actions against violators.⁴

During 1999, the 54 states (a term that included states, commonwealths, and territories) with federal approval to implement the drinking water program were also responsible for initiating enforcement actions in response to drinking water violations at public water systems in their jurisdictions. EPA implemented the drinking water program in Wyoming, the District of Columbia, and in Indian country. The Agency initiated enforcement responses in these areas and, occasionally, in the states — sometimes at a state’s invitation. Together, EPA and the states initiated almost 1,500 formal enforcement actions, each action potentially addressing multiple violations.

- In 1999, the states issued a total of 1,211 formal enforcement actions, including 808 administrative orders without penalty, 337 administrative orders with penalty, and 66 civil referrals to the state’s Attorneys General.
- During the same period, EPA issued a total of 221 formal enforcement actions, including 213 Federal administrative orders, five consent orders with penalties, and three referrals for civil judicial action.

These totals do not take into account the informal enforcement actions or the public water systems that returned to compliance before EPA and state procedures would require initiation of a formal response.

Perhaps the most meaningful way to measure the effectiveness of the EPA and state enforcement partnership is to compare the number of new significant noncompliers in 1999 to the number of significant noncompliers that remained unaddressed at the end of the year. EPA

3 For the annual compliance reports, EPA tracks violations of the contaminant rules in four categories: 1) **chemical contaminants (Chem)** — violations of rules for organic, inorganic (except for lead and copper), and radioactive contaminants — compliance with many organic and inorganic standards is determined on the basis of shared samples, with one missed sample resulting in a monitoring and reporting violation of many standards; 2) **total coliform (TCR)**; 3) **lead and copper (LCR)**; and 4) **surface water treatment (SWTR)**. Coliform bacteria are usually not a threat to humans, but their presence in drinking water can indicate a lapse in treatment and the possible presence of other, more dangerous, microbes.

4 There are several reasons why there will be a difference between the number of violations in a year and the number of formal enforcement responses. For example, a state may choose to address a system’s violations informally in a manner that returns the system to compliance before the time interval has elapsed that by EPA guidance would necessitate initiation of a formal enforcement response. Also, it is not uncommon for the regulator to address all of a violating system’s multiple violations in a single enforcement response. In addition, formal enforcement responses addressing violations discovered late in one reporting year are generally not initiated until early in the following year.

designates a public water system a significant noncomplier if the system has serious, frequent or persistent violations that may pose a threat to public health. States and EPA give significant noncompliers priority attention in their efforts to return violators to compliance and address violations with enforcement actions.

- In calendar year 1999, EPA designated 5,571 public water systems significant noncompliers. Most (98%) of these significant noncompliers served fewer than 3,300 users.
- Between January 1 and December 31, 1999, states and EPA addressed 6,410 significant noncompliers; 3,569 (64%) of the significant noncompliers that were new to 1999 and 2,841 from prior years.⁵ Only 23 of the new significant noncompliers that remained unaddressed at the end of 1999 served 10,000 or more users.
- At the end of 1999, there were 2,002 new and 1,447 old significant violators that had not been addressed. Fewer than 3% of these unaddressed significant noncompliers served 3,300 or more users.

DATA QUALITY

The data used in this report came from EPA's national SDWIS/FED database. SDWIS/FED is composed of data that states are required to submit to SDWIS/FED each quarter. EPA uses information in SDWIS/FED to assess progress in the implementation of regulations, to develop national enforcement and compliance priorities, and to provide information to the public.

EPA periodically conducts data verifications (independent, on-site audits) of state drinking water programs to ensure that the state is determining compliance in accordance with Federal regulations. Data verifications help detect differences between data in a state's files (whether electronic or hard copy), and data in SDWIS/FED.

As part of the ongoing data reliability efforts described in past National Public Water Systems Compliance Reports, EPA examined the results of data verifications conducted from 1996 through

1998. Those audits, which covered 27 states (including one where EPA itself administers the drinking water program) and one territory, analyzed data from almost 1,800 public water systems. The data audits reviewed inventory information (identifying systems, their number, their size, and their type), apparent violations that either were reported or should have been reported, and any enforcement actions initiated.

EPA's review showed that information the states reported to SDWIS/FED is generally very accurate. Most of the SDWIS/FED data problems EPA identified were instances where required data did not appear in SDWIS/FED. EPA found that a small percentage of this incompleteness is because SDWIS/FED will accept only properly transferred data. Most of the incompleteness resulted from states not reporting all of the apparent violations at their public water systems. EPA's analysis of the data verifications found:

- 96% of all inventory data in SDWIS/FED was accurate and complete.
- The overall quality of SDWIS/FED violations data is moderately high (estimated at 68%) for the Total Coliform Rule standard, but is very low for other health-based standards and for monitoring and reporting.
- Most of the discrepancies between apparent and reported violations are because of unrecorded and unreported violations. This accounts for 56% of all discrepancies related to maximum contaminant level violations, 83% of discrepancies related to Surface Water Treatment Rule treatment technique violations, and 94% of all discrepancies related to monitoring and reporting violations.
- Only 10% of apparent monitoring and reporting violations had been reported to SDWIS/FED.
- 55% of the apparent MCL violations had been reported to SDWIS/FED.
- SDWIS/FED contained accurate and complete information on 72% of the enforcement actions found in the states' records.

EPA's review found that most of the discrepancies seem to have resulted from a state's differing

⁵ Public water systems designated significant noncompliers late in the year are typically addressed early in the next year.

interpretation of what a regulation required. EPA found no information suggesting that unreported violations resulted in negative health effects. The states have submitted corrected information to SDWIS/FED, and EPA and the states have worked to address the violations discovered by this analysis.

EPA continues to work with all of its state partners to identify and resolve any problems that may have produced data discrepancies in the past and to ensure that complete and accurate documentation is available to help assess the safety of our nation's drinking water.

ENFORCEMENT AND COMPLIANCE ASSISTANCE PROGRAMS

States and EPA engage in a variety of activities to help public water systems remain in and return to compliance, including formal enforcement actions, informal actions, and compliance and technical assistance. State and EPA compliance assistance efforts may include:

- conducting on-site visits and sanitary surveys at public water systems (i.e., an on-site review of the water sources, facilities, equipment, operations, and maintenance to evaluate their adequacy in producing and distributing safe drinking water);
- helping systems invest in preventive measures;
- providing financial assistance for system improvements through the Drinking Water State Revolving Fund and other State funding programs;
- reviewing water system plans and specifications;
- conducting training sessions;
- holding public information meetings;
- lending specialized monitoring equipment; and
- publishing informational bulletins and newsletters on training events and other educational opportunities.

When a drinking water violation is detected, EPA guidelines require a response from the primacy agency as a condition of funding. Acceptable responses include a variety of formal and

informal actions as the state or EPA attempts to return a violating public water system to compliance as quickly as possible.

Generally, the primacy agency's first responses to violations are informal actions, such as:

- reminder letters;
- warning letters;
- notices of violation;
- field visits; and
- telephone calls.

If the violation continues or recurs, the primacy agency must initiate a formal enforcement response that requires the violating public water system to return to compliance. Formal enforcement responses include:

- citations;
- administrative orders with or without penalties;
- civil referrals to state attorneys general or to the Department of Justice;
- other sanctions such as denying permission for system expansion; and
- filing criminal charges.

If a situation poses an imminent risk to public health, EPA and the state will issue an emergency order that requires the public water system to take the steps necessary to protect public health and return the system to compliance.

INFORMATION ON AND EVALUATION OF STATE REPORTS

EPA reviewed each 1999 annual state report to determine if it met the requirements of the 1996 Amendments to SDWA. The contents of the state reports are summarized in Table B-1 in Appendix B. Table B-1 shows whether a state:

- submitted a report to EPA;
- included all required elements;
- satisfied its statutory requirement to publish and distribute summaries of the report that inform the public of the availability of the full report;
- identified the size and type of violating systems;

- discussed the compliance assistance and enforcement activities the state undertook in response to violations;
- included a list of PWSs with MCL or treatment technique violations, as EPA recommended in its guidance to states on preparing their reports;
- provided information to the public on availability of the reports; and
- included additional information of interest to the public, such as the number of public water systems in the state, their sizes and types, and background on the Safe Drinking Water Act and its implementation.

STATE-BY-STATE SUMMARIES

EPA provides a state-by-state summary of information reported in each state report in Appendix B. The standardized format includes an overall summary of the violations data the Safe Drinking Water Act requires states to report (i.e., violations with respect to MCLs, treatment technique violations, significant monitoring and reporting violations, and variances and exemptions). The summary for each state also tells how to obtain a copy of the state's full report.

In some instances, the data reported by a state in July of 1999 may not agree with data currently in SDWIS/FED. EPA's and the states' continual efforts to ensure that the information in the SDWIS/FED database is as accurate as possible may have resulted in updates and corrections to the data since the state published its report.

CONCLUSIONS AND ACTIVITIES TO ADDRESS RECOMMENDATIONS

A large majority of Americans received water from systems which reported no violations of health-based standards, and for which the states reported no significant violations of monitoring and reporting requirements.

There are significant differences in the numbers of violations reported in 1998 and 1999, most notably a 17% overall reduction in violations. In 1999, public water systems did a much better job of testing their water and reporting the results. The number of significant violations of monitoring and reporting requirements fell by

almost 15,000 — a 17% decrease in violations between 1998 and 1999. Even with more diligent monitoring, America's public water systems detected and reported 2,204 fewer violations of health-based standards in 1999 — a 14% decrease from 1998.

While the data indicate improved compliance at America's public water systems, the Total Coliform Rule remains, by far, the rule most frequently violated. This rule, which applies to all sizes and types of public water systems, was also the most violated rule in 1996, 1997, and 1998. The 36,578 significant violations of monitoring and reporting requirements of the Total Coliform Rule represent 51% of all significant monitoring and reporting violations reported by states in 1999. The 9,867 violations of the health-based standards for the Total Coliform Rule represent 70% of all reported violations of health-based standards in 1999. Even if significant violations of the monitoring and reporting provisions of the Total Coliform Rule are down 15% at community water systems, and violations of the rule's health-based standards have decreased by 19%, there still is much that can be done to safeguard our nation's drinking water.

The following recommendations were incorporated into EPA's enforcement and compliance assurance program planning for Fiscal Years 2000 and 2001.

States and EPA should continue working together to address significant violations of monitoring and reporting requirements.

States and EPA should continue working together to address violations of MCL and treatment technique requirements.

EPA designated compliance with the SDWA microbial rules (the Total Coliform Rule and the Surface Water Treatment Rule) as a national priority for its enforcement and compliance assurance program for Fiscal Years 2000 and 2001.

In 2000 and 2001, EPA Regions are working with states to evaluate how well public water systems, especially large systems, comply with the microbial rules and whether enforcement actions are being initiated when appropriate. Regions and states are also identifying and evaluating microbial risks to watersheds in an attempt to focus enforcement and compliance efforts on ensuring the safety of drinking water sources.

Considerable effort will also be devoted to training and compliance assistance. EPA will work to build the capacity of small public water systems and Indian tribes to maintain compliance both with established rules and with new microbial rules such as the Interim Enhanced Surface Water Treatment Rule and the Ground Water Rule.

With respect to the rest of the drinking water program, states and EPA are continuing their efforts to implement the recommendations of the 1996 and 1997 national public water system reports:

- EPA provides funding to support nine technology assistance centers that help small systems with training, technical assistance, and technology demonstrations.
- States and EPA help promote compliance with existing drinking water requirements by conducting numerous assistance activities, such as on-site visits and the development and distribution of easy-to-read guides and checklists.
- EPA funding established and maintains the Local Government Environmental Assistance Network (LGEAN), a source of free information on current and developing SDWA requirements (as well as technical assistance, peer counseling, and financial guidance). LGEAN can be accessed on the Internet at www.lgean.org or by calling toll-free 1-877-TO-LGEAN (865-4326).
- States worked with EPA to ensure community water systems sent consumers the first Annual Consumer Confidence Reports in 1999, allowing the public to monitor the performance of local water systems.
- Revisions to the Public Notification Rule mean that public water systems will send their customers more timely notification of drinking water violations.
- EPA is developing a list of approved compliance technologies that will allow small systems more flexibility in treating drinking water while still providing adequate public health protection.

- The states and EPA are pursuing enforcement actions against violating public water systems both to discourage violations and to level the playing field for systems that devote resources to maintaining compliance.

EPA, states, and drinking water stakeholders should continue to work cooperatively to improve the quality of compliance data.

Since September 1998, the findings and recommendations of the national public water systems reports have been incorporated into EPA's ongoing efforts to ensure the reliability of data in SDWIS/FED. In its first national report, EPA noted that compliance data in many individual state reports differed from the data reported to SDWIS/FED. In 1998, EPA, states, and drinking water stakeholders agreed that our data quality goal should be "100% complete, accurate, and timely data submitted by public water systems and primacy agencies, consistent with SDWA reporting requirements." Further analysis and discussions among the stakeholders led to establishment of interim milestones for how soon that goal will be achieved.

EPA, states, and the drinking water stakeholders made significant progress on most of the data recommendations of the earlier national reports — in some instances achieving full implementation. Among the major accomplishments, EPA has:

- improved the display of drinking water data in Envirofacts;
- characterized and quantified the data quality problem;
- taken interim steps to improve data quality, including improvements to the data entry tools states use to put information in SDWIS/FED and provision of a mechanism that enables water systems to confirm the accuracy of data before it is accepted by SDWIS/FED; and
- made a long-term commitment to achieve and maintain data quality goals.

More remains to be done to achieve the goal of 100% accurate, complete, and timely information. Some of the next steps EPA, states, and the drinking water stakeholders have agreed to undertake include:

- streamlining data reporting and reducing rule complexity;
- conducting more training to ensure regulatory staff can accurately determine compliance with drinking water rules and data entry staff can upload complete and accurate data to SDWIS/FED;
- making SDWIS/FED error reports more user friendly and understandable to state drinking water managers;
- encouraging states to issue annual reminders to water systems of their compliance monitoring schedules;
- providing states with individual, prioritized recommendations for improving their data quality;
- performing more frequent data verification audits; and
- calculating estimates for SDWIS/FED data quality every 3 years, or more frequently if data from a sufficient number of data verifications are available.

