

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

US EPA ARCHIVE DOCUMENT

ANNUAL COMPLIANCE REPORT

for

PUBLIC WATER SYSTEMS

in the

DISTRICT OF COLUMBIA

for

CALENDAR YEAR 2002

Customer Service Hotline: 1-800-438-2474

INTRODUCTION

The Drinking Water Program: An Overview

The U.S. Environmental Protection Agency (EPA) established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA and the 1986 and 1996 Amendments, EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs) and Maximum Residual Disinfectant Levels (MRDLs). For some regulations, EPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of contaminants in water. The Agency also regulates how often public water systems (PWSs) monitor their water for contaminants and report the monitoring results to the States or EPA. Generally, the larger the population served by a water system, the more frequent are the monitoring and reporting (M/R) requirements. In addition, EPA requires PWSs to monitor for selected unregulated contaminants to provide data for future regulatory development. Finally, EPA requires PWSs to notify the public when they have violated these regulations. The 1996 Amendments to the SDWA require public notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies during the violation.

The SDWA applies to the 50 States, the District of Columbia, Indian Lands, Puerto Rico, the Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

The SDWA allows States and Territories to seek EPA approval to administer their own PWSS Programs. The authority to run a PWSS Program is called primacy. For a state to receive primacy, EPA must determine that the state meets certain requirements laid out in the SDWA and the regulations, including the adoption of drinking water regulations that are at least as stringent as the Federal regulations and a demonstration that they can enforce the program requirements. Of the 56 States and Territories, all but Wyoming and the District of Columbia have primacy. The EPA Regional Offices administer the PWSS Programs within these two jurisdictions. Thus, the EPA Region III Office, in Philadelphia, PA, administers the PWSS Program in the District of Columbia.

The 1986 SDWA Amendments gave Indian Tribes the right to apply for and receive primacy. EPA currently administers PWSS Programs on all Indian lands except the Navaho Nation, which was granted primacy in late 2000.

Annual State PWS Report

Each quarter, primacy states submit data to the Safe Drinking Water Information System (SDWIS/FED), an automated database maintained by EPA. The data submitted include, but are not limited to, PWS inventory information, the incidence of Maximum Contaminant Level, Maximum

Residual Disinfectant Level, monitoring, and treatment technique violations, and information on enforcement activity related to these violations. Section 1414(c)(3) of the Safe Drinking Water Act requires states to provide EPA with an annual report of violations of the primary drinking water standards. This report provides the numbers of violations in each of six categories: MCLs, MRDLs, treatment techniques, variances and exemptions, significant monitoring violations, and significant consumer notification violations. The EPA Regional Offices report the information for Wyoming, the District of Columbia, and all Indian Lands but the Navaho Nation. EPA Regional offices also report Federal enforcement actions taken. Data retrieved from SDWIS/FED form the basis of this report.

DEFINITIONS

Public Water System

A Public Water System (PWS) is defined as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are three types of PWSs. PWSs can be community (such as cities and towns), nontransient noncommunity (such as schools or factories), or transient noncommunity systems (such as rest stops or parks). For this report when the acronym "PWS" is used, it means systems of all types unless specified in greater detail. **There are two community PWSs in the District of Columbia: 1) the Washington Aqueduct Division of the U.S. Army Corps of Engineers; and 2) the District of Columbia Water and Sewer Authority.**

Maximum Contaminant Level

Under the Safe Drinking Water Act, the EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs). **During calendar year 2002, no MCL violations occurred at either PWS in the District of Columbia.**

Maximum Residual Disinfectant Level

The EPA sets national limits on residual disinfectant levels in drinking water to reduce the risk of exposure to disinfection byproducts formed when public water systems add chemical disinfectant for either primary or residual treatment. These levels are known as Maximum Residual Disinfectant Levels (MRDLs). **During calendar year 2002, no MRDL violations occurred at either PWS in the District of Columbia.**

Treatment Techniques

For some regulations, the EPA establishes treatment techniques (TTs) in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, some bacteria, and turbidity. **During calendar year 2002, no treatment technique violations occurred at either PWS in the District of Columbia.**

Variations and Exemptions

Although variations and exemptions to specific requirements under the Safe Drinking Water Act Amendments of 1996 may be granted under certain circumstances, EPA has never issued any variations or exemptions to the public water systems in the District of Columbia. **Thus, during calendar year 2002, no violations of variations or exemptions occurred at either PWS in the District of Columbia.**

Monitoring

A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL. If a PWS fails to have its water tested as required, or fails to report test results correctly to the primacy agent, a monitoring violation occurs.

Monitoring for most chemical contaminants is done at the point(s) where water from the water treatment plant(s) enters the water storage and distribution system. The exceptions are bacteriological contaminants, trihalomethanes, lead and copper which are monitored at specific locations in the distribution system. **During calendar year 2002, no monitoring violations occurred at either PWS in the District of Columbia.**

Significant Monitoring Violations

For this report, significant monitoring violations are generally defined as any significant monitoring violation that occurred during the calendar year of the compliance report. A significant monitoring violation, with rare exceptions, occurs when no samples were taken or no results were reported during a compliance period. **During calendar year 2002, no significant (or minor) monitoring violations occurred at either PWS in the District of Columbia.**

Consumer Notification

Every Community Water System is required to deliver to its customers a brief annual water quality report. This report is to include some educational material, and will provide information on the source water, the levels of any detected contaminants, and compliance with drinking water regulations. **During calendar year 2002, no consumer notification violations occurred at either PWS in the District of Columbia.**

Significant Consumer Notification Violations

For this report, a significant public notification violation occurred if a community water system completely failed to provide its customers the required annual water quality report. **During calendar year 2002, no significant (or minor) consumer notification violations occurred at either PWS in the District of Columbia.**

DISTRICT OF COLUMBIA INFORMATION

Public Water Systems in the District of Columbia

There are two public water systems in the District of Columbia: 1) the Washington Aqueduct Division of the U.S. Army Corps of Engineers (the Aqueduct); and, 2) the District of Columbia Water and Sewer Authority (DC WASA). The Aqueduct owns and operates two water intakes on the Potomac River in Maryland, two water treatment plants in the District of Columbia, and three finished water storage reservoirs. The treatment plants, Dalecarlia and McMillan, can produce up to 340 million gallons per day (MGD) of potable water for the metropolitan Washington area.

The Aqueduct is a water wholesaler, and as such, has no distribution system of its own. Its primary customer is DC WASA, which owns and operates eight finished water storage facilities and the water distribution system within the District. (It should be noted that prior to the creation of DC WASA on October 1, 1996, the water distribution system was owned and operated by the former Water and Sewer Utility Administration (WASUA) which was part of the District of Columbia Department of Public Works.)

In addition to DC WASA, the Aqueduct supplies water to three customer PWSs in the Commonwealth of Virginia: Arlington County, the City of Falls Church, and Ronald Reagan Washington National Airport. These customer water systems are regulated by the Virginia Department of Health which has primacy for implementation of the PWSS Program in the Commonwealth. For reference in SDWIS, these five water systems are listed below along with their PWS identification numbers:

DC0000001 Washington Aqueduct

DC0000002 District of Columbia Water and Sewer Authority
VA6013010 Arlington County Department of Public Works
VA6013080 Ronald Reagan Washington National Airport
VA6610100 City of Falls Church Department of Public Utilities

The Aqueduct produces an average of 180 MGD of drinking water for the five water systems listed above which have a total population of about one million. The District, with a total population of approximately 600,000, consumes about 75 per cent of the Aqueduct's production. Although the District has about 60 per cent of the population served by the Aqueduct, it uses more water because it has a large transient population of commuters and tourists.

In addition to supplying water to the District, the Aqueduct provides significant assistance to DC WASA in complying with the monitoring and reporting requirements of the SDWA. The Aqueduct collects and provides analytical services for all of the required entry point samples, which satisfies the requirements for itself as well as its customer PWSs. In addition, the Aqueduct collects and analyzes all of the bacteriological and trihalomethane samples required for DC WASA's distribution system. Responsibility for compliance with lead and copper monitoring is split between the Aqueduct and DC WASA. DC WASA arranges for the collection of lead and copper samples at customers' taps and the Aqueduct laboratory provides the analyses. The Aqueduct collects and analyzes the distribution system samples required for the assessment of optimal corrosion control treatment. On an annual basis, the Aqueduct's laboratory collects and analyzes over 35,000 samples for more than 125 parameters.

The Aqueduct compiles the results of the analyses into monthly monitoring reports for DC WASA and itself. The Aqueduct submits its report directly to EPA Region III. DC WASA uses the data provided by the Aqueduct to prepare the report it submits to EPA Region III. DC WASA periodically prepares and submits its own report of lead and copper sampling at its customers' taps.

Previous SDWA Violations in the District of Columbia

The drinking water regulation known as the Total Coliform Rule (TCR) requires each PWS to collect monthly samples from representative sites in its distribution system for testing for the presence of coliform bacteria. Every coliform positive sample must also be tested to determine if is positive for fecal coliform or *E. coli*. Every coliform positive sample must also be followed by additional repeat samples. The number of samples collected each month is dependent on the size of the population served. In the District of Columbia, a minimum of 210 samples must be collected and analyzed each month. A routine monthly violation of the TCR occurs if more than 5 per cent of the samples collected in a particular month are found to be total coliform positive. An acute violation of the TCR occurs if a total coliform positive sample is found to also be positive for fecal coliform or *E. coli*, and if any of the repeat samples are also coliform positive. (An acute violation can also occur if the initial sample is only coliform positive and any of the repeat samples is fecal coliform or *E. coli* positive.)

In the fall of 1995 and the summer of 1996, WASUA incurred several routine monthly and one acute TCR MCL violation. In addition, a sanitary survey of the District's water storage and distribution system conducted earlier in 1995 found numerous operational and maintenance deficiencies in the system. In response to these events, EPA Region III issued a notice of violation and proposed administrative order in November 1995 which directed WASUA to develop short and long term plans to correct the deficiencies. EPA Region III then began negotiating a final consent order with WASUA to finalize the plans for remediation and for upgrading the water storage and distribution system. Negotiations were completed and the order was signed in July 1996. WASUA exceeded the TCR monthly MCL (i.e., more than 5% of samples collected monthly were coliform positive) during June, July and August 1996. However, neither WASUA nor its successor DC WASA had additional MCL violations during the last four months of 1996 and no violations at all during calendar years 1997, 1998, 1999 and 2000. Meanwhile, DC WASA has continued to implement its remediation plan and has submitted quarterly progress reports to Region III as required by the administrative order. Region III has determined that DC WASA has completed all of the requirements of the order and has recently closed out the order. Region III staff have continued to work closely with Aqueduct and DC WASA staff to upgrade the system.

It should be noted that Region III has had an open administrative order for the Washington Aqueduct since March 1994 (which was prior to the commencement of annual compliance reports in 1996). This order was issued in response to the Aqueduct's violation of the turbidity requirements of the Surface Water Treatment Rule (SWTR) in December 1993. In 1994, the Aqueduct submitted a modernization plan to EPA to comply with the order. According to one of the elements of this plan, the Aqueduct intended to construct a solids recovery facility to treat the residuals from the sedimentation basins. This facility would allow the Aqueduct to comply with future National Pollutant Discharge Elimination System (NPDES) permits which were expected to require substantial reductions in the amount of solids discharged to the Potomac River. The facility would also eliminate the accumulations of residuals in the basins which was one of the problems that led to the turbidity rule violation in December 1993.

EPA did not anticipate that it would be 2003 before the NPDES permit would be reissued. This permit will require the Aqueduct to implement a process, or processes, to treat the basin residuals on a continuing basis. EPA had kept the order open to be sure that concerns about the effects of solids accumulation in the basins were addressed by the requirements of the new discharge permit. EPA believes that the discharge limits of the permit satisfy the concerns addressed by the administrative order. Therefore, Region III has closed out this order.

In summary, both the Washington Aqueduct and the District of Columbia Water and Sewer Authority had no SDWA violations during calendar year 2002.

Lead and Copper Rule Compliance

During the most recent monitoring period which ended in June 2002, the District of Columbia Water and Sewer Authority (DC WASA) exceeded the lead action level (AL) with a 90th percentile of 0.075 mg/L. The Lead and Copper Rule (LCR) requires that no more than 10 per cent of the lead and copper samples collected during a defined monitoring may exceed the lead and copper action levels. Thus, 90 percent of the samples must be equal to, or below the ALs, which are 0.015 mg/L for lead and 1.3 mg/L for copper. These levels are determined by the 90th percentile values. DC WASA has never exceed the AL for copper. This is DC WASA's first exceedance of the lead AL since December 1993. It should be noted that this exceedance is **not** a violation of the (LCR) drinking water regulation. However, DC WASA was required to complete the following activities to insure its compliance with the LCR:

- Resume full monitoring for lead and copper at customers' taps in calendar year 2003.
- Prepare and deliver a public education program to advise consumers how they can protect themselves from exposure to lead in drinking water, and to inform the public regarding steps that will be taken to reduce the lead level. This program was implemented in October 2002 with the publication of a brochure concerning lead in the environment which has and will continue to be distributed to the public in the District of Columbia.
- Develop and implement a lead service line replacement program. The LCR requires that a system that exceeds the lead action level after corrosion control treatment has been installed must replace seven percent of the lead service lines which the system owns each year, or until tap water monitoring indicates that its 90th percentile lead level is below 0.015 mg/L. DC WASA has formulated, and is implementing, a plan to identify, prioritize, and replace 1600 lead service lines in calendar year 2003.

EPA has arranged for a contractor to review the current corrosion control treatment process and recommend possible improvements or alternatives in calendar year 2003.

PWSS Program Activities in the District of Columbia

EPA Region III's Water Protection Division works closely with the Washington Aqueduct and DC WASA in the implementation of the PWSS Program in the District. The Region has provided, and is continuing to provide, services to the District such as the following:

- Training for water treatment plant and distribution system operators.
- Training for distribution system maintenance and repair personnel.
- Sanitary surveys of the water treatment, storage and distribution systems.

- Sanitary surveys of several large water users in the District.
- Drinking water survey of day care centers in the District.
- Assistance to the DC Department of Health in conducting a source water assessment of the Potomac River.
- Technical assistance to the Aqueduct and DC WASA as needed.

During calendar year 2002, Region III assisted the Aqueduct and DC WASA in developing plans for the issuance of the District's third Consumer Confidence Report (CCR), which was delivered in June 2002. Region III also worked with the Aqueduct, DC WASA, and the Virginia customers concerning water system security issues. EPA has provided funding to these water systems to evaluate their security procedures, refine their emergency operation plans, and to upgrade their cyber security systems.

Additional information about the PWSS Program in the District, or extra copies of this report may be obtained by contacting:

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Copies of the Annual Compliance Reports for Public Water Systems in the District of Columbia for Calendar Years 2000, 2001 and 2002 may also be found on the web at:

www.epa.gov/reg3wapd/drinkingwater/DCdrinking/

Appendix A
Violations Table
 (with SDWIS Codes)

| | |
|----------------------------|---|
| State: | District of Columbia |
| Reporting Interval: | January 1, 2002 to December 31, 2002 |

| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|------------------------------------|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| | Organic Contaminants | | | | | | | |
| 2981 | 1,1,1-Trichloroethane | 0.2 | 0 | 0 | | | 0 | 0 |
| 2977 | 1,1-Dichloroethylene | 0.007 | 0 | 0 | | | 0 | 0 |
| 2985 | 1,1,2-Trichloroethane | .005 | 0 | 0 | | | 0 | 0 |
| 2378 | 1,2,4-Trichlorobenzene | .07 | 0 | 0 | | | 0 | 0 |
| 2931 | 1,2-Dibromo-3-chloropropane (DBCP) | 0.0002 | 0 | 0 | | | 0 | 0 |
| 2980 | 1,2-Dichloroethane | 0.005 | 0 | 0 | | | 0 | 0 |
| 2983 | 1,2-Dichloropropane | 0.005 | 0 | 0 | | | 0 | 0 |
| 2063 | 2,3,7,8-TCDD (Dioxin) | 3x10 ⁻⁸ | 0 | 0 | | | 0 | 0 |
| 2110 | 2,4,5-TP | 0.05 | 0 | 0 | | | 0 | 0 |
| 2105 | 2,4-D | 0.07 | 0 | 0 | | | 0 | 0 |
| 2265 | Acrylamide | | | | 0 | 0 | | |

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| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|---------------------------|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| 2051 | Alachlor | 0.002 | 0 | 0 | | | 0 | 0 |
| 2050 | Atrazine | 0.003 | 0 | 0 | | | 0 | 0 |
| 2990 | Benzene | 0.005 | 0 | 0 | | | 0 | 0 |
| 2306 | Benzo[a]pyrene | 0.0002 | 0 | 0 | | | 0 | 0 |
| 2046 | Carbofuran | 0.04 | 0 | 0 | | | 0 | 0 |
| 2982 | Carbon tetrachloride | 0.005 | 0 | 0 | | | 0 | 0 |
| 2959 | Chlordane | 0.002 | 0 | 0 | | | 0 | 0 |
| 2380 | cis-1,2-Dichloroethylene | 0.07 | 0 | 0 | | | 0 | 0 |
| 2031 | Dalapon | 0.2 | 0 | 0 | | | 0 | 0 |
| 2035 | Di(2-ethylhexyl)adipate | 0.4 | 0 | 0 | | | 0 | 0 |
| 2039 | Di(2-ethylhexyl)phthalate | 0.006 | 0 | 0 | | | 0 | 0 |
| 2964 | Dichloromethane | 0.005 | 0 | 0 | | | 0 | 0 |
| 2041 | Dinoseb | 0.007 | 0 | 0 | | | 0 | 0 |
| 2032 | Diquat | 0.02 | 0 | 0 | | | 0 | 0 |
| 2033 | Endothall | 0.1 | 0 | 0 | | | 0 | 0 |

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|----------------------------|---|
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| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|---------------------------------|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| 2005 | Endrin | 0.002 | 0 | 0 | | | 0 | 0 |
| 2257 | Epichlorohydrin | | | | 0 | 0 | | |
| 2992 | Ethylbenzene | 0.7 | 0 | 0 | | | 0 | 0 |
| 2946 | Ethylene dibromide | 0.00005 | 0 | 0 | | | 0 | 0 |
| 2034 | Glyphosate | 0.7 | 0 | 0 | | | 0 | 0 |
| 2065 | Heptachlor | 0.0004 | 0 | 0 | | | 0 | 0 |
| 2067 | Heptachlor epoxide | 0.0002 | 0 | 0 | | | 0 | 0 |
| 2274 | Hexachlorobenzene | 0.001 | 0 | 0 | | | 0 | 0 |
| 2042 | Hexachlorocyclopentadiene | 0.05 | 0 | 0 | | | 0 | 0 |
| 2010 | Lindane | 0.0002 | 0 | 0 | | | 0 | 0 |
| 2015 | Methoxychlor | 0.04 | 0 | 0 | | | 0 | 0 |
| 2989 | Monochlorobenzene | 0.1 | 0 | 0 | | | 0 | 0 |
| 2968 | o-Dichlorobenzene | 0.6 | 0 | 0 | | | 0 | 0 |
| 2969 | para-Dichlorobenzene | 0.075 | 0 | 0 | | | 0 | 0 |
| 2383 | Total polychlorinated biphenyls | 0.0005 | 0 | 0 | | | 0 | 0 |

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|-------------|----------------------------|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| 2326 | Pentachlorophenol | 0.001 | 0 | 0 | | | 0 | 0 |
| 2987 | Tetrachloroethylene | 0.005 | 0 | 0 | | | 0 | 0 |
| 2984 | Trichloroethylene | 0.005 | 0 | 0 | | | 0 | 0 |
| 2996 | Styrene | 0.1 | 0 | 0 | | | 0 | 0 |
| 2991 | Toluene | 1 | 0 | 0 | | | 0 | 0 |
| 2979 | trans-1,2-Dichloroethylene | 0.1 | 0 | 0 | | | 0 | 0 |
| 2955 | Xylenes (total) | 10 | 0 | 0 | | | 0 | 0 |
| 2020 | Toxaphene | 0.003 | 0 | 0 | | | 0 | 0 |
| 2036 | Oxamyl (Vydate) | 0.2 | 0 | 0 | | | 0 | 0 |
| 2040 | Picloram | 0.5 | 0 | 0 | | | 0 | 0 |
| 2037 | Simazine | 0.004 | 0 | 0 | | | 0 | 0 |
| 2976 | Vinyl chloride | 0.002 | 0 | 0 | | | 0 | 0 |
| | | | | | | | | |
| | | | | | | | | |
| 2950 | Total trihalomethanes | 0.080 | 0 | 0 | | | 0 | 0 |

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| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|-------------------------------|------------------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| | Inorganic Contaminants | | | | | | | |
| 1074 | Antimony | 0.006 | 0 | 0 | | | 0 | 0 |
| 1005 | Arsenic | 0.010 | 0 | 0 | | | 0 | 0 |
| 1094 | Asbestos | 7 million fibers/l ≤ 10 μm long | 0 | 0 | | | 0 | 0 |
| 1010 | Barium | 2 | 0 | 0 | | | 0 | 0 |
| 1075 | Beryllium | 0.004 | 0 | 0 | | | 0 | 0 |
| 1015 | Cadmium | 0.005 | 0 | 0 | | | 0 | 0 |
| 1020 | Chromium | 0.1 | 0 | 0 | | | 0 | 0 |
| 1024 | Cyanide (as free cyanide) | 0.2 | 0 | 0 | | | 0 | 0 |
| 1025 | Fluoride | 4.0 | 0 | 0 | | | 0 | 0 |
| 1035 | Mercury | 0.002 | 0 | 0 | | | 0 | 0 |
| 1040 | Nitrate | 10 (as Nitrogen) | 0 | 0 | | | 0 | 0 |
| 1041 | Nitrite | 1 (as Nitrogen) | 0 | 0 | | | 0 | 0 |

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| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|---------------------------|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| 1045 | Selenium | 0.05 | 0 | 0 | | | 0 | 0 |
| 1085 | Thallium | 0.002 | 0 | 0 | | | 0 | 0 |
| 1038 | Total nitrate and nitrite | 10 (as Nitrogen) | 0 | 0 | | | 0 | 0 |

| | |
|----------------------------|---|
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| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|---------------------------|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| | Radionuclide MCLs | | | | | | | |
| 4000 | Gross alpha | 15 pCi/l | 0 | 0 | | | 0 | 0 |
| 4010 | Radium-226 and radium-228 | 5 pCi/l | 0 | 0 | | | 0 | 0 |
| 4101 | Gross beta | 4 mrem/yr | 0 | 0 | | | 0 | 0 |
| | Subtotal | | 0 | 0 | | | 0 | 0 |

| | |
|----------------------------|---|
| State: | District of Columbia |
| Reporting Interval: | January 1, 2002 to December 31, 2002 |

| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|--|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| | Total Coliform Rule | | | | | | | |
| 21 | Acute MCL violation | Presence | 0 | 0 | | | | |
| 22 | Non-acute MCL violation | Presence | 0 | 0 | | | | |
| 23,25 | Major routine and follow up monitoring | | | | | | 0 | 0 |
| 28 | Sanitary survey ² | | | | | | 0 | 0 |
| | Subtotal | | 0 | 0 | | | 0 | 0 |

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|----------------------------|---|
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| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|------------------------------|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| | Surface Water Treatment Rule | | | | | | | |
| | Filtered systems | | | | | | | |
| 36 | Monitoring, routine/repeat | | | | | | 0 | 0 |
| 41 | Treatment techniques | | | | 0 | 0 | | |
| | Unfiltered systems | | | | | | | |
| 31 | Monitoring, routine/repeat | | | | | | Not applicable | Not applicable |
| 42 | Failure to filter | | | | Not applicable | Not applicable | | |
| | Subtotal | | | | 0 | 0 | 0 | 0 |

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|----------------------------|---|
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| SDWIS Codes | | MCL (mg/l) ¹ | MCLs | | Treatment Techniques | | Significant Monitoring/Reporting | |
|-------------|--|----------------------------|----------------------|-----------------------------------|----------------------|-----------------------------------|----------------------------------|-----------------------------------|
| | | | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations | Number of Violations | Number of Systems With Violations |
| | Lead and Copper Rule | | | | | | | |
| 51 | Initial lead and copper tap M/R | | | | | | 0 | 0 |
| 52 | Follow-up or routine lead and copper tap M/R | | | | | | 0 | 0 |
| 58,62 | Treatment Installation | | | | 0 | 0 | | |
| 65 | Public education | | | | 0 | 0 | | |
| | Subtotal | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | |

1. Values are in milligrams per liter (mg/l), unless otherwise specified.
2. Number of major monitoring violations for sanitary survey under the Total Coliform Rule.

Definitions for Violations Table

The following definitions apply to the Summary of Violations table.

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

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

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

Initial lead and copper tap M/R: SDWIS Violation Code 51 indicates that a system did not meet initial lead and copper testing requirements, or failed to report the results of those tests to the State.

Follow-up or routine lead and copper tap M/R: SDWIS Violation Code 52 indicates that a system did not meet follow-up or routine lead and copper tap testing requirements, or failed to report the results.

Treatment installation: SDWIS Violation Codes 58 AND 62 indicate a failure to install optimal corrosion control treatment system (58) or source water treatment system (62) which would reduce lead and copper levels in water at the tap. [One number is to be reported for the sum of violations in these two categories].

Public education: SDWIS Violation Code 65 shows that a system did not provide required public education about reducing or avoiding lead intake from water.

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

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

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

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

Radionuclides: Radioactive particles which can occur naturally in water or result from human activity. EPA has set legal limits on four types of radionuclides: radium-226, radium-228, gross alpha, and beta particle/photon radioactivity [40 CFR 141]. Violations for these contaminants are to be reported using the following three categories:

Gross alpha: SDWIS Contaminant Code 4000 for alpha radiation above MCL of 15 picocuries/liter. Gross alpha includes radium-226 but excludes radon and uranium.

Combined radium-226 and radium-228: SDWIS Contaminant Code 4010 for combined radiation from these two isotopes above MCL of 5 pCi/L.

Gross beta: SDWIS Contaminant Code 4101 for beta particle and photon radioactivity from man-made radionuclides above 4 millirem/year.

Reporting Interval: The reporting interval for violations to be included in the first PWS Annual Compliance Report, which is to be submitted to EPA by January 1, 1998, is from July 1, 1996 through June 30, 1997. This interval will change for future annual reports. See guidance language for these intervals.

SDWIS Code: Specific numeric codes from the Safe Drinking Water Information System (SDWIS) have been assigned to each violation type included in this report. The violations to be reported include exceeding contaminant MCLs, failure to comply with treatment requirements, and failure to meet monitoring and reporting requirements. Four-digit SDWIS Contaminant Codes have also been included in the chart for specific MCL contaminants.

Surface Water Treatment Rule: The Surface Water Treatment Rule establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water [40 CFR 141, Subpart H]. Violations of the "Surface

Water Treatment Rule” are to be reported for the following four categories:

Monitoring, routine/repeat (for filtered systems): SDWIS Violation Code 36 indicates a system’s failure to carry out required tests, or to report the results of those tests.

Treatment techniques (for filtered systems): SDWIS Violation Code 41 shows a system’s failure to properly treat its water.

Monitoring, routine/repeat (for unfiltered systems): SDWIS Violation Code 31 indicates a system’s failure to carry out required water tests, or to report the results of those tests.

Failure to filter (for unfiltered systems): SDWIS Violation Code 42 shows a system’s failure to properly treat its water. Data for this violation code will be supplied to the States by EPA.

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

Acute MCL violation: SDWIS Violation Code 21 indicates that the system found fecal coliform or *E. coli*, potentially harmful bacteria, in its water, thereby violating the rule.

Non-acute MCL violation: SDWIS Violation Code 22 indicates that the system found total coliform in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, more than 5% of the samples positive for total coliform is a violation.

Major routine and follow-up monitoring: SDWIS Violation Codes 23 AND 25 show that a system did not perform any monitoring. [One number is to be reported for the sum of violations in these two categories.]

Sanitary Survey: SDWIS Violation Code 28 indicates a major monitoring violation if a system fails to collect 5 routine monthly samples if sanitary survey is not performed.

Treatment Techniques: A water disinfection process that EPA requires instead of an MCL for contaminants that laboratories cannot adequately measure. Failure to meet other operational and system requirements under the Surface Water Treatment and the Lead and Copper Rules have also been included in this category of violation for purposes of this report.

Unfiltered Systems: Water systems that do not need to filter their water before disinfecting it because the source is very clean [40 CFR, Subpart H].

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