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

**ANNUAL COMPLIANCE REPORT**

**for**

**PUBLIC WATER SYSTEMS**

**in the**

**DISTRICT OF COLUMBIA**

**during**

**CALENDAR YEAR 2011**

## 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 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, Pennsylvania, administers the PWSS Program in the District of Columbia and is responsible for producing this Annual Compliance Report.

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 Navajo 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), an automated database maintained by EPA. The data submitted include, but are not limited to, PWS inventory information; the incidence of Maximum Contaminant Level (MCL), Maximum Residual Disinfectant Level (MRDL), 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 Navajo Nation. EPA Regional offices also report Federal enforcement actions taken in those locations. Data retrieved from SDWIS form the basis of this report. A summary of calendar year 2011 violations for the District of Columbia is included in Appendix A of this report.

### DEFINITIONS AND SUMMARY OF 2011 DATA

#### 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.

The principal community PWSs in the District of Columbia are the Washington Aqueduct Division of the U.S. Army Corps of Engineers (Aqueduct), which treats the water served to the District, and the District of Columbia Water and Sewer Authority (DC Water), which distributes and sells water to District of Columbia customers. *(Note: In June 2010, DC Water announced that the authority would begin doing business as DC Water; however, the full, legal name of the authority has not changed and remains the District of Columbia Water and Sewer Authority.)*

In addition to the above, four (4) consecutive PWSs were actively operating during calendar year 2011 in the District, were subject to the requirements of the SDWA and performed continued compliance monitoring. These systems, which purchase water from DC Water, are: Naval Station Washington (i.e., Washington Navy Yard), Naval Observatory, Anacostia – Joint Base Anacostia Bolling (JBAB) *(previously known as Naval Station Washington – Anacostia)*, and Bolling – JBAB *(previously known as Bolling - Air Force Base.)* The adjoining but separate military installations previously known as Naval Support Facility Anacostia and Bolling Air Force Base were consolidated to be Joint Base Anacostia Bolling (JBAB) in October 2010, but EPA has retained the two separate public water systems for the two installations because the ownership structure of the water systems remains distinct.

### **Maximum Contaminant Level Violations**

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 2011, no MCL violations occurred at any of the PWSs in the District of Columbia.

### **Maximum Residual Disinfectant Level Violations**

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 2011, no MRDL violations occurred at any of the PWSs in the District of Columbia.

### **Treatment Technique Violations**

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. In addition, the Lead and Copper Rule (LCR) specifies two types of activities - providing educational materials on lead to water system customers and replacement of lead water service lines - which must be performed by systems that exceed the lead action level. These activities are considered treatment technique requirements under the LCR.

One treatment technique violation is included in the Calendar Year 2011 Violation Summary in Appendix A. The water system, Bolling – JBAB, failed to correct three significant deficiencies identified in the previous 2008 sanitary survey report. A sanitary survey is an onsite review of the water facilities, equipment, operation, maintenance, and monitoring compliance to evaluate the adequacy of the water system and the distribution of safe drinking water. A significant deficiency includes a defect in design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that EPA determines to be causing, or has the potential for causing, the introduction of contamination into the water delivered to consumers. The three significant deficiencies were due to have been corrected by December 31, 2009. The water system, Bolling – JBAB, is required to create and submit to the EPA a Corrective Plan by July 8, 2012 that responds to all of the significant deficiencies and includes a timeline for completion. As of June 2012, Bolling – JBAB intends that all deficiencies will be resolved by December 30, 2012. This violation has not yet returned to compliance.

No treatment technique violations occurred at any of the other PWSs in the District of Columbia during calendar year 2011.

### **Monitoring Violations**

A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCLs or MRDLs or violate treatment techniques. If a PWS fails to have its water tested as required, or fails to report test results correctly to the primacy agency, 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, disinfection byproducts, and lead and copper which are monitored at specific locations in the distribution system.

One monitoring violation is included in the Calendar Year 2011 Violation Summary in Appendix A. The water system, Bolling – JBAB, failed to submit to EPA the analytical results from repeat samples that were collected following a total coliform positive bacteriological sample collected on November 22, 2011. If a water system has a total coliform positive bacteriological result, it is required to collect repeat bacteriological samples until all results confirm that no bacteriological contamination exists. Bolling – JBAB had collected the required repeat samples in November 2011 but had failed to submit the results to EPA. This violation was returned to compliance when EPA Region III received the required analytical results on December 27, 2011.

No monitoring violations occurred at any of the other PWSs in the District of Columbia during calendar year 2011.

### **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 samples were not taken or results were not reported during a compliance period.

During calendar year 2011, no significant monitoring violations occurred at any of the PWS in the District of Columbia.

### **Consumer Notification Violations**

Every Community Water System is required by the Consumer Confidence Report (CCR) Rule to deliver to its customers a brief annual water quality report. This report includes some educational material, and provides information on the source water, the levels of any detected contaminants, and compliance with drinking water regulations.

The following three consumer notification violations are included in the Calendar Year 2011 Violation Summary in Appendix A. Three water systems, the Washington Navy Yard, Bolling – JBAB, and Anacostia – JBAB failed to provide copy of the calendar year 2010 Consumer Confidence Report to EPA Region III prior to July 1, 2011. These violations were returned to compliance when EPA Region III received the 2010 Consumer Confidence Report for Anacostia – JBAB and Bolling - JBAB on July 6, 2011 and the Washington Navy Yard on July 13, 2011. These consumer notification violations are not considered Significant Consumer Notification Violations because the Consumer Confidence Report was issued to the public as required.

During calendar year 2011, no consumer notification violations occurred at any of the other PWSs in the District of Columbia.

### **Significant Consumer Notification Violations**

For this report, a significant consumer notification violation occurred if a community water system completely failed to provide for its customers the required annual water quality report.

During calendar year 2011, no significant consumer notification violations occurred at any of the community water systems in the District of Columbia.

### **Public Notice Violations**

The Public Notice Rule requires all PWS to notify their consumers any time a PWS violates a national primary drinking water regulation or has a situation posing a risk to public health. Notices must be provided to persons served (not just billing consumers).

During calendar year 2011, no public notice violations occurred at any of the PWS in the District of Columbia.

### **Other Violations**

One violation is included in the Calendar Year 2011 Violation Summary in Appendix A and was not previously described in the categories above. The water system, Bolling – JBAB, failed to notify EPA prior to an increase of the capacity of the water system. The water system, Bolling – JBAB, is required to create and submit to the EPA a Corrective Plan by July 8, 2012 that responds to issues related to an increase of the capacity of the water system and the Plan is required to include a timeline for completion. As of June 2012, Bolling – JBAB intends that all deficiencies will be resolved by December 30, 2012. This violation has not yet returned to compliance.

## Variations and Exemptions

A primacy state can grant to a PWS a variance from a primary drinking water regulation if the characteristics of the raw water sources reasonably available to the PWS do not allow the system to meet the MCL.

A primacy state can also grant an exemption temporarily relieving a PWS of its obligation to comply with an MCL or treatment technique or both if the system's noncompliance results from compelling factors (which may include economic factors) and the system was in operation on the effective date of the MCL or treatment technique requirement.

Although variances 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 variances or exemptions to the public water systems in the District of Columbia.

## Waivers

A primacy state can grant a waiver to a PWS from a monitoring requirement if the PWS is not vulnerable to a contaminant, and waiver of the contaminant is allowable under the regulations. In 2011, EPA granted an asbestos monitoring waiver to two water systems, Washington Navy Yard and Anacostia – JBAB, for the monitoring period of 2011 to 2013. During the next compliance period of 2014 to 2016, these two water systems will be required to either perform asbestos compliance monitoring or apply for a waiver renewal. The waiver was issued because the PWS was not vulnerable to asbestos in its source water and because the PWS did not have asbestos cement pipe installed in its pipe distribution system.

No waivers of any other contaminant monitoring have been granted by EPA to public water systems in the District of Columbia for monitoring required by the national primary drinking water regulations.

## DISTRICT OF COLUMBIA INFORMATION

### Public Water Systems in the District of Columbia

There are two principal 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 Water). 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 Water, which owns and operates eight finished water storage facilities and the water distribution system within the District. DC Water does not further treat the water in any way. (It should be noted that prior to the creation of the DC Water and Sewer Authority 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.)

Four (4) facilities in the District are consecutive PWSs subject to the requirements of the SDWA and purchase water from DC Water: Naval Station Washington (Washington Navy Yard), Naval Observatory, Anacostia - JBAB, and Bolling - JBAB. *(Note: The adjoining but separate military installations previously known as Naval Station Washington - Anacostia and Bolling Air Force Base were consolidated to be Joint Base Anacostia Bolling (JBAB) in October 2010, but EPA has retained the two separate public water systems for the two installations because the ownership structure of the water systems remains distinct.)* None of the Navy or Air Force facilities provided additional water treatment for water provided to its consumers in 2011.

In addition to DC Water, 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, the water systems are listed below along with their PWS identification numbers:

DC0000001	Washington Aqueduct
DC0000002	District of Columbia Water and Sewer Authority <i>(Note: In June 2010, DC WASA announced that the authority would begin doing business as DC Water; however, the full, legal name of the authority has not changed.)</i>
DC0000003	Naval Station Washington (Washington Navy Yard)

DC0000004	Anacostia – Joint Base Anacostia-Bolling ( <i>Note: Known as Naval Station Washington – Anacostia prior to October 2010.</i> )
DC0000005	Naval Observatory
DC0000007	Bolling – Joint Base Anacostia-Bolling ( <i>Note: Known as Bolling Air Force Base prior to October 2010.</i> )
DC0000008	Children’s National Medical Center ( <i>Note: Ceased operations as a public water system since October 29, 2010.</i> )
VA6013010	Arlington County Department of Public Works
VA6013080	Ronald Reagan Washington National Airport
VA6610100	City of Falls Church Department of Public Utilities

During 2011, EPA Region III issued numerous request for information letters to federal facilities located in Virginia that are connected to a federally-owned water main to determine whether these facilities meet the definition of a Public Water System. EPA Region III’s efforts to identify such facilities continue into 2011.

The Aqueduct produces an average of 180 MGD of drinking water for the 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 percent of the Aqueduct’s production. Although the District has about 60 percent of the population served by the Aqueduct, it uses more water because it has a large transient population of commuters and tourists.

Because the Aqueduct and DC Water have individual responsibilities for complying with the SDWA, both systems need to work together to ensure that the District’s drinking water meets federal standards. The Aqueduct is responsible for compliance with all of the regulations which pertain to water treatment such as filtration, disinfection and chemical contaminant removal, and corrosion control. DC Water is responsible for the regulations for total coliform bacteria, lead and copper, and disinfection byproducts, which are applicable to the distribution system. The water treatment techniques applied by the Aqueduct directly affect the quality of the water in DC Water’s system. The distribution system operation and maintenance activities conducted by DC Water also directly affect the quality of water delivered to its customers.

The Aqueduct provides significant formal and informal assistance to DC Water in complying with the monitoring and reporting requirements of the SDWA. The Aqueduct collects and provides analytical services for all of the required distribution system entry point samples for organic and inorganic chemical contaminants, which satisfies the requirements for itself as well as its customer PWSs. In addition, the Aqueduct provides contractual laboratory services for DC Water, analyzing all of the bacteriological and disinfection byproduct samples collected from DC Water’s distribution system. Responsibility for compliance with lead and copper monitoring is split between the Aqueduct and DC Water. DC Water arranges for the collection of lead and copper samples at customers’ taps and the Aqueduct laboratory performs the analyses as provided by its contract with DC Water. The Aqueduct and DC Water staff also collect and analyze 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 of compliance samples. The Aqueduct includes this data in the monthly monitoring report it submits to EPA Region III. Other data is forwarded to DC Water for use in preparing its monitoring reports, which are also submitted to EPA Region III.

### **Lead and Copper Rule Compliance Actions**

A discussion of DC Water's Lead and Copper Rule (LCR) compliance actions for calendar year 2011 is provided below. For additional information on DC Water's compliance with the LCR, please see the Annual Compliance Reports for the District of Columbia for years 2004 through 2009. More information and links to additional resources are also available on the EPA website: [www.epa.gov/dclead](http://www.epa.gov/dclead).

#### Lead and Copper Tap Sampling

After exceeding the lead action level (AL) from 2002 through 2004, DC Water continued to conduct full monitoring for lead and copper at customers' taps from 2005 through 2009. DC Water met the lead AL of 0.015 mg/L for all monitoring periods during this time. DC Water again performed full monitoring for lead and copper in 2011, meeting the lead action level for both monitoring periods (0.005 mg/L for both of the January 1 – June 30 and the July 1 – December 31 monitoring periods). DC Water did not exceed the copper AL of 1.3 mg/L in any of these monitoring periods. The copper results for calendar year 2011 were 0.124 mg/L for the January 1 – June 30 monitoring period and 0.106 for the July 1 – December 31 monitoring period.

### **Corrosion Control Treatment**

In February 2004, EPA Region III convened a Technical Expert Working Group (TEWG), comprising representatives from DC Water, the Washington Aqueduct, EPA, the Department of Health and the D.C. Department of the Environment, and the Centers for Disease Control and Prevention, to coordinate research and communications. This working group continues to meet quarterly to discuss research on lead corrosion and other District drinking water quality issues. In April 2004, the TEWG recommended that the Aqueduct implement the application of an orthophosphate corrosion inhibitor as a method to reduce the drinking water lead levels. The Aqueduct began adding an orthophosphate corrosion inhibitor (phosphoric acid) to the entire system in August 2004 and continues this treatment today. In 2006, EPA approved application of an orthophosphate corrosion inhibitor as the final optimal corrosion control treatment. No changes to the corrosion control treatment have been made since 2006.

## PWSS Program Activities in the District of Columbia

EPA Region III's Water Protection Division works closely with the Washington Aqueduct, DC Water, the Navy facilities, and Joint-Base Anacostia Bolling in the implementation of the PWSS Program in the District. The Region III has in the past provided, and in some cases continues 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; and
- Assistance to the DC government in conducting a source water assessment of the Potomac River.

Specifically, during calendar year 2011, Region III:

- Developed and provided comprehensive monitoring guidance and other resources, including emergency preparedness and response resources, to all public water systems in the District;
- Issued notices of non-compliance for the monitoring/recordkeeping and consumer notice violations described previously (see: "Definitions and Summary of 2011 Data");
- Developed a Request for Information for Bolling - JBAB for the system expansion notification violation as described previously (see: "Definitions and Summary of 2011 Data");
- Continued to assist the Aqueduct and DC Water in their research efforts on previously elevated levels of lead in drinking water;
- Reviewed changes to compliance monitoring locations;
- With contractors, performed a sanitary survey of the following Public Water Systems: DC Water and Bolling – JBAB;
- Hosted a workshop "Managing Hospital Drinking Water Systems" for District of Columbia metropolitan Hospitals
- Reviewed status of two approved water treatment changes, completed in 2011 at the Washington Aqueduct's treatment plants;
- Reviewed drafts of the Consumer Confidence Reports (CCRs) produced by DC Water, Anacostia – JBAB, Bolling - JBAB, and the Washington Navy Yard water systems and reviewed draft public notices as needed throughout the year, ensuring that required language was included and the public was appropriately informed;
- Continued to work with the Aqueduct, DC Water, and the Virginia customers concerning water system security issues;
- Remained committed to source water protection efforts through continued participation with the Potomac River Basin Drinking Water Source Protection Partnership.
- Was reviewed by a third-party entity to evaluate whether Drinking Water Branch communication, organizational, data flow, compliance determination or tracking procedures could be improved;

- Completed installation and began use of new database software, SDWIS State, for storage of drinking water system data and information;
- Approved waivers of asbestos monitoring for the Washington Navy Yard, Anacostia – JBAB, and asbestos monitoring plans and resultant monitoring by DC Water, Naval Observatory, and Bolling – JBAB;
- Reviewed drinking water regulations as they apply to locations having installed additional treatment
- Performed routinely scheduled Laboratory Review of the Washington Aqueduct analytical procedures and quality processes
- Prepared water system inventory and draft sampling plan for Unregulated Contaminant Monitoring Rule 3 for the water systems in the District of Columbia;
- Reviewed voluntary radiological monitoring results for Iodine 131, Cesium 134 & 137 in surface water and drinking water after the Fukushima Daiichi nuclear incident
- Reviewed voluntary monitoring results for hexavalent chromium as provided to EPA Region III by the Washington Aqueduct and DC Water

#### **ACCESS TO COPIES OF 2011 PUBLIC WATER SYSTEMS REPORT**

As required by the Safe Drinking Water Act, EPA Region III has made the 2011 Public Water Systems report available to the public. Interested individuals can obtain a copy of the 2011 Annual Public Water Systems Report for the District of Columbia by accessing:

Website: <http://www.epa.gov/reg3wapd/drinking/dc.htm>

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**Appendix A: Calendar Year 2011 Violation Summary for the District of Columbia**

Contaminant or rule	Violation Type											
	MCLs			Monitoring <sup>‡</sup>			Treatment Technique			Consumer Notification		
	# of viols <sup>a</sup>	# of RTC viols <sup>b</sup>	# of PWS in viol <sup>c</sup>	# of viols <sup>a</sup>	# of RTC viols <sup>b</sup>	# of PWS in viol <sup>c</sup>	# of viols	# of RTC viols	# of PWS in viol	# of viols	# of RTC viols	# of PWS in viol
IOC	0	0	0	0	0	0						
RAD	0	0	0	0	0	0						
SOC	0	0	0	0	0	0						
VOC	0	0	0	0	0	0						
TCR	0	0	0	1	1	1						
LCR				0	0	0	0	0	0			
SWTR				0	0	0	1	0	1			
DBP	0	0	0	0	0	0	0	0	0			
GWR	0	0	0	0	0	0	1	0	1			
CCR										3	3	3
PN										0	0	0
Grand totals* :	0	0	0	1	1	1	2	0	1	3	3	3

*A shaded box indicates that the violation type is not applicable to a contaminant or rule.*

<sup>‡</sup> Only major monitoring violations are included in this table. Minor monitoring and reporting violations are identified separately in Appendix B.

\* A single PWS may have violations for multiple contaminants or rules; therefore, the grand total of “# of PWS in viol” may not equal the sum of values in that column.

Notes:

a: “# of viols” refers to the number of violations of a specific type for each rule during calendar year 2011

b: “# of RTC viols” refers to the number of violations that have been returned to compliance as of the end of calendar year 2011

c: “# of PWS in viol” refers to the number of public water systems in the District of Columbia which had a specific type of violation for a given rule during calendar year 2011

**Details by PWS ID**

<b>PWS ID</b>	DC0000007				
<b>System name</b>	Bolling – Joint Base Anacostia-Bolling				
<b>Population</b>	12,499				
	<b>Contaminant</b>	<b>Violation type (SDWIS code)</b>	<b>Compliance period begin date</b>	<b>Compliance period end date</b>	<b>Violation ID</b>
3100	Coliform (TCR)	25 <sup>1</sup>	11/1/2011	11/31/2011	12

<b>PWS ID</b>	DC0000007				
<b>System name</b>	Bolling – Joint Base Anacostia-Bolling				
<b>Population</b>	12,499				
	<b>Contaminant</b>	<b>Violation type (SDWIS code)</b>	<b>Compliance period begin date</b>	<b>Compliance period end date</b>	<b>Violation ID</b>
0800	LT2ESWTR	45	12/31/2009	N/A	14

<b>PWS ID</b>	DC0000007				
<b>System name</b>	Bolling – Joint Base Anacostia-Bolling				
<b>Population</b>	12,499				
	<b>Contaminant</b>	<b>Violation type (SDWIS code)</b>	<b>Compliance period begin date</b>	<b>Compliance period end date</b>	<b>Violation ID</b>
0700	Groundwater Rule	5 <sup>2</sup>	04/28/2011 <sup>2</sup>	N/A	13

<sup>1</sup> The violation code used represents lack of monitoring. This violation was a violation of reporting of required monitoring data to EPA, although required monitoring was performed.

<sup>2</sup> The violation code used represents lack of notification of compliance monitoring. This violation was a violation of lack of notification of expansion of water system.

<b>PWS ID</b>	DC0000003				
<b>System name</b>	Naval Station Washington (Washington Navy Yard)				
<b>Population</b>	11,000				
	<b>Contaminant</b>	<b>Violation type (SDWIS code)</b>	<b>Compliance period begin date</b>	<b>Compliance period end date</b>	<b>Violation ID</b>
7000	Consumer Confidence Rule	71	07/01/2011	N/A	6

<b>PWS ID</b>	DC0000004				
<b>System name</b>	Anacostia – Joint Base Anacostia-Bolling				
<b>Population</b>	3,260				
	<b>Contaminant</b>	<b>Violation type (SDWIS code)</b>	<b>Compliance period begin date</b>	<b>Compliance period end date</b>	<b>Violation ID</b>
7000	Consumer Confidence Rule	71	07/01/2011	N/A	5

<b>PWS ID</b>	DC0000007				
<b>System name</b>	Bolling – Joint Base Anacostia-Bolling				
<b>Population</b>	12,499				
	<b>Contaminant</b>	<b>Violation type (SDWIS code)</b>	<b>Compliance period begin date</b>	<b>Compliance period end date</b>	<b>Violation ID</b>
7000	Consumer Confidence Rule	71	07/01/2011	N/A	11

**Annual Compliance Report totals for calendar year 2011**

Total number of regulated systems	6
Total number of violations	6
Total number of RTC violations	4
Total number of systems with violations	3

## Definitions

### *Violation type definitions*

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

**MCL:** Maximum Contaminant Level – 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.

**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.

**Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water

**Consumer Notification:** A required process for providing information to customers of a public water system

**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 contaminants.

*Contaminant or rule definitions*

**CCR:** Consumer Confidence Report – The annual report on water quality which must be distributed to customers of a community water system. SDWIS Violation Code 71 indicates a failure to provide this report to customers of a community water system and the primacy agency.

**DBP:** Disinfectant and Disinfection Byproduct Rules – Disinfectants such as chlorine, chloramine and chlorine dioxide are regulated by EPA. SDWIS Violation Code 13 indicates an acute MRDL violation. Disinfectant Byproducts including chlorite and two groups of disinfection byproducts are regulated by EPA.

*TTHM:* Total Trihalomethanes – SDWIS Contaminant Code 2950 is the sum of four (4) regulated trihalomethane species.

*HAA5:* Haloacetic Acids (sum of 5) – SDWIS Contaminant Code 2456 is the sum of five (5) regulated haloacetic acids. SDWIS Violation Code 27 indicates a monitoring violation.

**GWR: Ground Water Rule** - Establishes criteria under which water systems supplied by ground water sources, must monitor and/or disinfect their water [40 CFR 141, Subpart S]. Some of the violations of the Ground Water Rule that are to be reported include the following:

*Failure to notify:* SDWIS Violation Code 5 indicates failure to notify the State that it failed to meet State-specified requirements at a system conducting compliance monitoring.

*Monitoring, routine:* SDWIS Violation Code 31 indicates a system's failure to carry out required disinfectant water tests, or to report the results of those tests.

*Failure to provide treatment:* SDWIS Violation Code 42 shows a system's failure to properly treat its water in response to a positive source water sample.

*Treatment techniques:* SDWIS Violation Code 45 shows a system's failure to develop within 120 days and/or comply with an approved compliance schedule to correct a sanitary survey significant deficiency.

**IOC:** Inorganic Contaminant - 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].

**LCR:** 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 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.

**LSLR:** Lead Service Line Replacement – SDWIS Violation Code 64 indicates that a system required to replace lead service lines did not meet the lead service line replacement requirements of the Lead and Copper Rule.

**PN:** Public Notification - Notification that water systems must provide to their customers upon discovering any violation of a contaminant standard.

**RAD:** Radionuclides - Radioactive particles which can occur naturally in water or result from human activity. EPA has set legal limits on the following types of radionuclides: radium-226, radium-228, uranium, gross alpha, and beta particle/photon radioactivity [40 CFR 141.66]. Violations for these contaminants are to be reported using the following categories:

*Gross alpha:* SDWIS Contaminant Code 4000 for alpha radiation above MCL of 15 picocuries/liter (pCi/L). 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.

*Uranium:* SDWIS Contaminant Code 4006 for uranium levels above MCL of 30 micrograms per liter ( $\mu\text{g/L}$ ).

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

**SOC or VOC:** Synthetic Organic Contaminant or Volatile Organic Contaminant - Organic contaminants are 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].

**SWTR:** 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 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.

*Sanitary survey:* SDWIS Violation Code 45 shows a system's failure to develop within 45 days and/or comply with an approved compliance schedule to correct a sanitary survey significant deficiency.

**TCR:** 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 the following 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.

*Monitoring, Major routine and follow-up:* SDWIS Violation Codes 23 AND 25 show that a system failed to collect all of the required samples including routine or repeat.

**Appendix B: Minor Monitoring and Reporting Violations not included in Annual Compliance Report totals**

**All violations in 2011 were included in Appendix A. No additional Minor Monitoring and Reporting Violations occurred in 2011**