DEPARTMENT OF THE NAVY
JOINT BASE ANACOSTIA-BOLLING
20 MACDILL BLVD, SUITE 300
WASHINGTON, D.C. 20032-7711

5090
Ser J4/0176
12 Jun 15

From: Commanding Officer, Joint Base Anacostia-Bolling
To: Commanders/Directors of Tenant Organizations

Subj: 2014 ANNUAL DRINKING WATER QUALITY REPORT, JOINT BASE ANACOSTIA-BOLLING (ANACOSTIA SIDE), PUBLIC WATER SYSTEM (PWS) #DC0000004

Encl: (1) 2014 Annual Drinking Water Quality Report for Joint Base Anacostia-Bolling (JBAB) (Anacostia Side) Public Water System (PWS) #DC0000004
(2) District of Columbia Water and Sewer Authority (DC Water) 2015 Drinking Water Quality Report

1. In accordance with federal drinking water regulations, Joint Base Anacostia-Bolling (JBAB) (Anacostia side) is providing you with the 2014 Annual Drinking Water Quality Report for JBAB (Anacostia side) PWS #DC0000004, enclosure (1), and the District of Columbia Water and Sewer Authority's (DC Water's) 2015 Drinking Water Quality Report, enclosure (2).

2. This routine report is required by law, and is being provided to ensure that you have all of the information regarding the quality of your drinking water. This is not being sent in response to a health threat.

3. JBAB (Anacostia side) drinking water originates from the Potomac River and is treated by the U.S. Army Corps of Engineers, Washington Aqueduct (WA). The WA uses chloramines as a disinfectant. DC Water purchases drinking water from the WA and distributes it to residences and businesses in the District, including JBAB (Anacostia side).

4. Federal drinking water regulations require the Public Works Department (PWD) to monitor the drinking water distribution system for specific contaminants at JBAB (Anacostia side). The results of routine monitoring are an indicator of whether or not your drinking water meets Safe Drinking Water Act standards.

Subj: 2014 ANNUAL DRINKING WATER QUALITY REPORT, JOINT BASE ANACOSTIA-BOLLING (ANACOSTIA SIDE), PUBLIC WATER SYSTEM (PWS) #DC0000004

5. The 2014 Annual Drinking Water Quality Report for JBAB (Anacostia side), PWS #DC0000004, enclosure (1), provides information regarding drinking water monitoring conducted on JBAB (Anacostia side). DC Water's 2015 Drinking Water Quality Report, enclosure (2), provides the monitoring data for DC Water for 2014. These enclosures provide important information about the following topics:

a. Drinking Water Quality Monitoring Results for JBAB-Anacostia side) conducted in CY 2014;

b. Important health effects information;

c. Definitions of key terms, such as maximum contaminant level;

d. Contaminants reasonably expected to be found in drinking water;

e. Sources of drinking water and contaminants that may be present in source waters;

f. Environmental Protection Agency (EPA) and Food and Drug Administration regulations;

g. Non-English speaking population information; and

h. EPA Safe Drinking Water Hotline telephone number (800-426-4791).

6. If you have any questions with regard to the quality of your drinking water, contact the JBAB Installation Environmental Program Director, Ms. Madina Alharazim at 202-404-8204.

Sincerely,

C. F. MAYS, JR
Captain, U.S. Navy
Commanding Officer
Joint Base Anacostia-Bolling

2014 ANNUAL DRINKING WATER QUALITY REPORT

JOINT BASE ANACOSTIA-BOLLING (JBAB) (ANACOSTIA SIDE), PUBLIC WATER SYSTEM (PWS) #DC0000004

JBAB (Anacostia side) distributes drinking water to residential and non-residential buildings on the installation. This water is supplied to JBAB (Anacostia side) by the District of Columbia Water and Sewer Authority (DC Water). The DC Water purchases the water from the US Army Corps of Engineers, Washington Aqueduct who treats the water by removing impurities and adding a disinfectant to control microorganism levels. DC Water conducts water quality monitoring throughout the city to ensure that the water delivered throughout the District meets Federal drinking water quality standards. Routine sampling and monitoring activities at JBAB (Anacostia side) are done by the Environmental Group in the Public Works Department (PWD). Those monitoring results are contained in Table 1 of this report.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency (EPA) and Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426–4791.

Cryptosporidium - The Washington Aqueduct monitors for *Cryptosporidium* in the Potomac River monthly. *Cryptosporidium* is a microbial pathogen found in most surface water in the U.S. In October 2005, the Washington Aqueduct detected *Cryptosporidium* at 1.5 oocysts per 100 liters in one sample. *Cryptosporidium* was not detected in any other sample since that time. Once *Cryptosporidium* is detected in the source water, Washington Aqueduct is required to ensure that their drinking water treatment system is adequate to control *Cryptosporidium*.

Ingesting *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness. JBAB (Anacostia side) encourages immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.

Lead - If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 2 minutes before using water for drinking or cooking. JBAB (Anacostia side) met EPA standards for lead (see Table 1). If you are concerned about lead in your water, please contact JBAB's Environmental drinking water program manager at 202-404-1273. Information on lead in drinking water, testing methods, and steps you can

take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead

Total Coliform Monitoring Violation

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During December 2014, we did not complete all monitoring or testing for total coliform and therefore cannot be sure of the quality of your drinking water during that time.

Because JBAB (Anacostia side) is normally required to collect fewer than five routine samples per month and one routine sample collected in November 2014 was positive for total coliform, JBAB (Anacostia side) was required to collect at least five samples from approved monitoring locations during the next month, December 2014. JBAB (Anacostia side) collected routine samples from five locations in December 2014, all of which were negative for total coliform bacteria. However, one of the samples collected was from a location not in the approved sampling plan. This constitutes a violation of the Safe Drinking Water Act. JBAB (Anacostia side) has submitted a revised total coliform monitoring plan for review by EPA Region III and has returned to normal collection of four samples per month of total coliform.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Maintaining High Water Quality in residential and non-residential buildings

What is the difference between building pipes and distribution mains?

Building pipes and distribution mains both move water. The difference is how fast the water is moving. Distribution mains typically have high water velocities that keep water fresh because of the continuous demand on the system. However, once the water leaves the main and enters a customer's service line, the water only turns over as fast as consumers use it. Water in buildings has the tendency to stagnate during off-work hours or vacation times.

Buildings also tend to keep water warmer, which can deteriorate water quality and at times create taste and odor issues.

What can I do to improve water quality?

As a tenant, you play a larger role in enhancing the water quality within the building. Here are a few actions that can be taken to prevent water quality degradation and even contamination.

- **Flush Lines After Extended Periods of Stagnation** - Often buildings will shut down over weekends and holidays. Following extended days of water stagnation, flush a tap at the furthest end of the building from where the water originates on each floor for 15 minutes. In addition, flush each frequently used fountain/tap for 2 minutes.

- **Maintain Water Fountains** - Many fountains have filters that remove chlorine taste, reduce byproducts of chlorine, and reduce sediments and particulate metals such as lead, copper, and iron which can leach from in-house plumbing. However, without routine maintenance and changing of these filters as recommended by the manufacturer, water quality will diminish considerably. Carbon filters that are not changed will eventually accumulate enough nutrients for bacteria to grow. As bacteria activity increases, their byproducts can reduce water quality. Another common water filter is a sediment filter. If these filters are not routinely changed they will begin to accumulate excessive amounts of metals which may eventually break through the filter or leach into the water during times of excessive stagnation, which may be considered any period greater than six (6) hours without water use.

- **Clean Strainers/Aerators** - Periodically remove and clean the strainer/ aerator device on faucets in the building to remove debris.

- **Keep Water Coolers Clean** - Many buildings purchase bottled water coolers for drinking water purposes. Unlike tap water, the water provided in these coolers contains no disinfectant and therefore provides the potential for bacterial growth in the cooler dispenser. Coolers must be routinely cleaned as prescribed by the manufacturer.

Water Conservation. For information on what you can do to conserve water, please visit www.epa.gov/watersense.

Table 1. 2014 Water Quality Data Table

The table below lists all of the drinking water contaminants detected that are applicable for the calendar year of this report.

Microbial Indicators							
	Units	EPA Limits		JBAB-Anacostia Drinking Water		Violations	Description/Typical Sources of Contaminants
		MCLG	MCL or TT	Highest	Range		
Total Coliform Bacteria	# of positive samples	0	1 positive sample/month	1*	0-1	Yes	Naturally present in the environment
Fecal Coliform	Number Positive	0	0	0	0	No	Human and animal fecal waste
E. coli Bacteria	Number Positive	0	0	0	0	No	Human and animal fecal waste
*Total coliform monitoring results met the Safe Drinking Water Act Maximum Contaminant Level requirement, but a monitoring violation occurred due to failure to complete all monitoring or testing for total coliform in December 2014, as described on page 2 of this attachment.							

Disinfectants							
	Units	EPA Limits		JBAB-Anacostia Drinking Water		Violations	Description/Typical Sources of Contaminants
		MCLG	MCL or TT	Highest	Range		
Chlorine	ppm	4 (MRDLG) annual average	4.0 (MRDL) annual average	3.8	0.04-3.8*	No	Water additives that protects against microbial contamination. Chlorine is combined with ammonia to form chloramine.
*Any time the residual chlorine samples did not contain the minimum chlorine concentration of 0.10 mg/L a heterotrophic plate count (HPC) sample was collected and analyzed. HPC monitoring that is less than 500 colony forming units (CFU) or Most Probable Number (MPN) per mL is considered to have a detectable chlorine residual. All the samples that did not contain the minimum chlorine concentration did have less than 500 CFUs when the HPC sample was analyzed and therefore had a detectable level of chlorine.							

Disinfection byproducts							
	Units	EPA Limits		JBAB-Anacostia Drinking Water		Violations	Description/Typical Sources of Contaminants
		MCLG	MCL or TT	Highest	Range		
Total Trihalomethanes-Monitoring Period 2013	ppb	N/A	80	47	25-64	No	Trihalomethanes are a byproduct of drinking water disinfection
Haloacetic Acids-Monitoring Period 2013	ppb	N/a	60	31	14-36	No	Haloacetic acids are a byproduct of drinking water disinfection

Nitrate and Nitrite							
	Units	EPA Limits		JBAB-Anacostia Drinking Water		Violations	Description/Typical Sources of Contaminants
		MCLG	MCL or TT	Highest	Range		
Nitrate	ppm	10	10	2.2	2.1-2.2	No	Runoff from fertilizer use; erosion from natural deposits
Nitrite	ppm	1	1	0.38	<0.20-0.38	No	Runoff from fertilizer use; erosion from natural deposits

Lead and Copper							
	Units	EPA Limits		JBAB-Anacostia Drinking Water		Violations	Description/Typical Sources of Contaminates
		MCLG	MCL or TT	Samples Above AL	Range and 90th Percentile		
Lead-Monitoring Period June to Sept 2012	ppb	0	15	0	All results non-detect to <2 90th percentile is <2	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper-Monitoring period June to Sept 2012	ppm	1.3	1.3	0	0.005 to 0.42 90th percentile is 0.18	No	Corrosion of household plumbing systems; erosion of natural deposits
The results listed in the table represent required Lead and Copper sampling conducted once every 3 years. Sampling will be conducted again in 2015.							

Data Table Key: Unit Descriptions

AL	Action Level
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residential Disinfectant Level
MRDLG	Maximum Residential Disinfectant Level Goal
TT	Treatment Technique
ppb	Parts per billion
ppm	Parts per million

Important Drinking Water Definitions

MCLG	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MCL	This highest level of contaminant that is allowed in drinking water. MCLs are set as close as feasible using the best available treatment technology.
TT	A required process intended to reduce the level of contaminant in drinking water.
AL	The concentration of a contaminant, which, if exceeded triggers treatment or other requirements which a water systems must follow.
MRDLG	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of the disinfectants to control microbial contaminants.
MRDL	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

For More Information Please Contact:
JBAB Installation Environmental Program Director
370 Brookley Avenue SW, Washington, DC 20032
Phone: 202-404-8204

dc water is life®

2015 DRINKING WATER QUALITY REPORT

– Summarizing 2014 Water Quality Test Results

Enclosure (2)

2015 DRINKING WATER QUALITY REPORT

DC WATER CONTACT INFORMATION

Drinking Water Division..... (202) 612-3440
Customer Service..... (202) 354-3600
24-Hour Command Center..... (202) 612-3400
External Affairs..... (202) 787-2200
dcwater.com

Additional contacts:

US Army Corps of Engineers
Washington Aqueduct..... (202) 764-2703
nab.usace.army.mil/Missions/WashingtonAqueduct.aspx

District Department of the Environment.. (202) 535-2600
ddoe.dc.gov

Interstate Commission on
the Potomac River Basin..... (301) 984-1908
potomacriver.org

EPA Region III Drinking Water Branch..... (215) 814-2321

The **2015 Water Quality Report** is available for download at **dcwater.com/waterreport**.

Reports from previous years can be viewed at **dcwater.com/waterquality/waterquality_reports.cfm**. Please call 202-787-2200 or send an email to externalaffairs@dcwater.com to request a printed copy.

CONTENTS

Este reporte contiene información importante sobre su agua potable. Para obtener una traducción del reporte, por favor comuníquese con la Oficina de Asuntos Externos a través del 202-787-2200 o externalaffairs@dcwater.com.

ይህ ዘገባ ስለሚጠጡት ውሃ አስፈላጊ መረጃወችን የያዝ ነው ። የተተረጎመውን ዘገባ ለማግኘት አባኮን የውጪ ጉዳይ ጽሕፈት ቤትን በስልክ ቁጥር 202-787-2200 ወይንም በሚሜል externalaffairs@dcwater.com ያግኙ።

该报告包含有关您的饮用水的重要信息。如需翻译版的报告，请联系外事办公室，电话：**202-787-2200**，电子邮件：**externalaffairs@dcwater.com**。

Báo cáo này có chứa thông tin quan trọng về nước uống của bạn. Vui lòng liên hệ Phòng Đối Ngoại theo số 202-787-2200 hoặc địa chỉ externalaffairs@dcwater.com nếu bạn muốn có bản dịch báo cáo.

Ce rapport contient des renseignements importants à propos de votre eau potable. Si vous souhaitez vous procurer un rapport traduit, veuillez communiquer avec le Bureau des affaires extérieures en composant le 202-787-2200, ou connectez-vous à externalaffairs@dcwater.com.

If you have a question about this report and require assistance from a translator, please contact Customer Service at 202-364-3600 (8 a.m. to 5 p.m., Monday through Friday).

Dear Customers,

It is with great pride that I present your 2015 Water Quality Report, which details the outstanding quality of your drinking water and reflects the dedication of more than 1,100 employees who serve you seven days a week and 24 hours a day. Customer safety is our first priority, and the test results presented in this report demonstrate that your drinking water surpassed the water quality standards established by the U.S. Environmental Protection Agency (EPA). In 2014, DC Water collected more than 5,000 water samples and conducted over 30,000 tests to ensure that high quality water reaches residents and businesses in the District of Columbia.

Please take this opportunity to learn more about your drinking water and DC Water's efforts to protect public health and our drinking water source, the Potomac River. We are committed to serving you the best water at the lowest possible price and protecting your drinking water source for generations to come. If you have questions, concerns or suggestions, please contact us at one of the numbers listed on the previous page.

Sincerely,

George S. Hawkins, CEO and General Manager

YOUR DRINKING WATER QUALITY

In the following pages, you will find an overview of the required and voluntary water testing programs that protect our drinking water system. In order to ensure that tap water is safe to drink, the Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

THE POTOMAC RIVER – YOUR DRINKING WATER SOURCE

Drinking water for the District of Columbia comes from the Potomac River, a "surface water" supply. The U.S. Army Corps of Engineers, Washington Aqueduct collects water from the Potomac River and is responsible for treatment to meet Environmental Protection Agency's safe drinking water standards. DC Water purchases drinking water from the Washington Aqueduct. The Washington Aqueduct is responsible for monitoring water quality in the Potomac River and testing treated water before it enters the drinking water distribution system. To view the Washington Aqueduct's Annual Water Quality Report, visit dcwater.com/wadreport.

The sources ofdrinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land and into the Potomac River, it dissolves naturally occurring minerals, and in some cases, radioactive material. The water can also pick up substances resulting from the presence of animals or human activity. Prior to water treatment, contaminants that may be present in source water include:

- Microorganisms, such as viruses and bacteria that may come from agricultural livestock operations, septic systems, wastewater treatment plants and wildlife.
- Inorganic chemicals, such as salts and metals that can be naturally occurring or result from urban stormwater runoff, farming, and industrial or domestic wastewater discharges.
- Pesticides and herbicides that may come from agriculture, urban stormwater runoff and residential uses.
- Organic chemicals, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive chemicals that can be naturally-occurring or the result of mining activities.

SOURCE WATER PROTECTION EFFORTS

DC Water is a member of the Potomac River Basin Drinking Water Source Protection Partnership, a collaborative effort by drinking water suppliers and government agencies to protect shared drinking water sources. The group is updating vulnerability assessments that will enhance emergency response and prevention capabilities for Potomac Basin stakeholders. This assessment effort will also inform protection efforts and best practices for managing regional water resources. For more information about the Partnership's efforts, visit potomacdwspp.org.

The Interstate Commission on the Potomac River Basin (ICPRB) conducted a source water assessment of the Potomac River watershed in April 2002. The assessment identified urban runoff, toxic spills, agriculture and inadequate wastewater treatment as potential contamination sources to the water supply.
The source water assessment report can be found at
potomacriver.org/wp-content/uploads/2014/12/DC_SWA_redacted.pdf.

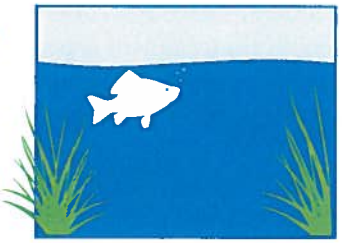
PROTECTING YOUR DRINKING WATER SUPPLY

Protect The Watershed – A watershed is an area of land that drains to a particular point along a stream or river. The best way to protect the Potomac River from contamination is to help protect the watershed. You can help protect your drinking water supply in several ways:

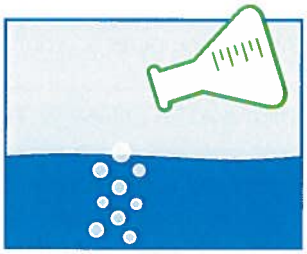
- Prevent trash and debris from entering storm drains and catch basins. To report a clogged drain or basin, call (202) 612-3400.
- Dispose of household waste, grease and motor oil properly.
- Report spills that could potentially enter the waterways by calling the DC 311 Call Center.
- Do not flush pharmaceuticals down the toilet or drain. Find a drug take-back location or properly dispose of medications in the garbage.

DRINKING WATER QUALITY IS A SHARED RESPONSIBILITY OF DC WATER AND RESIDENTS

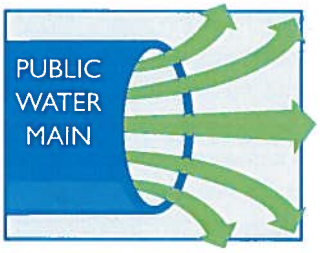
1. Drinking water is drawn from the Potomac River by the Washington Aqueduct.



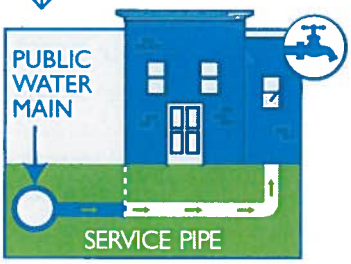
2. The Washington Aqueduct is responsible for water treatment.



3. DC Water is responsible for monitoring water quality in the distribution system.



4. Customers are responsible for ensuring that water quality is maintained on private property.



DRINKING WATER TREATMENT

The Washington Aqueduct collects water from the Potomac River and treats the water at the Dalecarlia and McMillan Treatment Plants. Like most public water systems around the country, the Washington Aqueduct uses a multi-step treatment process. The treatment process includes sedimentation, filtration, fluoridation, pH adjustment, disinfection using free chlorine and chloramine (chlorine + ammonia), and corrosion control using orthophosphate. DC Water works closely with the Aqueduct to ensure that the water leaving the plant meets the Environmental Protection Agency drinking water standards. Once the water leaves the treatment plant, DC Water collects samples throughout the District of Columbia to monitor the quality of the water as it travels through the pipes to your tap.

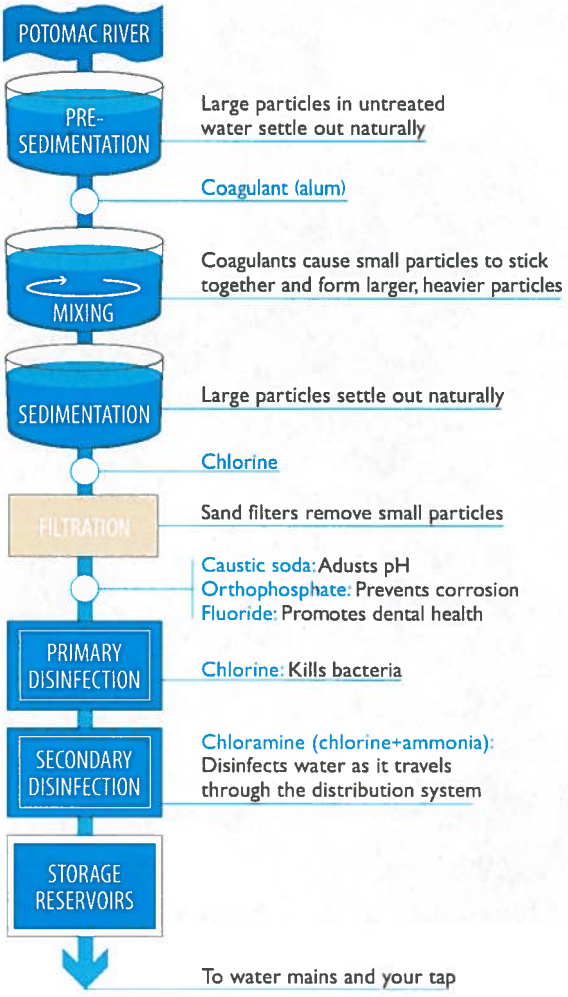
DRINKING WATER DISINFECTION

The Environmental Protection Agency requires the disinfection of water supplies to protect public health. The Washington Aqueduct uses chloramine, a combination of chlorine and ammonia, to disinfect the drinking water that is delivered to the District. Chloramine is a common disinfectant used to protect water supplies from harmful bacteria and viruses that can be found in rivers and streams. DC Water continuously monitors the drinking water to ensure that safe disinfectant levels are maintained in the distribution system. Chloramine must be removed from water used for kidney dialysis and aquariums. Contact your kidney dialysis center, physician or local pet store about water treatment for removing chloramine. For more information about chloramine, visit dcwater.com/water/faqs.

Why is chlorine used for disinfection?

Most of the year, chloramine is used for drinking water disinfection in the District. For a short period each year, disinfection switches from chloramine to chlorine. This change is part of an annual program to clean water pipes and maintain water quality throughout the year. This is a standard practice for water systems that use chloramine during the majority of the year. Public water systems use chlorine and chloramine to kill harmful bacteria and viruses that can make people sick. The level of chlorine is safe for consumption, but you can reduce the chlorine smell and taste by placing an open pitcher of water in the fridge. If you haven't used water in several hours, let the cold water run for 2 minutes before filling the pitcher.

WATER TREATMENT PROCESS DALECARLIA AND MCMILLAN WATER TREATMENT PLANTS



IMPORTANT HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Cryptosporidium

Cryptosporidium is a microbial pathogen found in most surface water in the U.S. The Washington Aqueduct monitors for Cryptosporidium in the Potomac River every month. Cryptosporidium has not been detected in a single sample since October 2005. Ingesting Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness. DC Water encourages immuno-compromised individuals to consult their doctor regarding appropriate precautions to avoid infection.

Lead

Drinking water is essentially lead-free when it leaves the treatment plant, but lead can be released when the water comes in contact with pipes and plumbing fixtures that contain lead. Lead sources and lead levels vary between buildings, so it is important to identify and remove any lead sources in each household. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. A water service line connects the water main in the street to your household plumbing. The service line is owned by the property owner. The Washington Aqueduct and DC Water are responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your cold water tap for at least 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you should determine if you have lead plumbing or other sources of lead on your property. To request information about your water service pipes, please contact Customer Service at (202) 354-3600. Residents may also request a free lead test kit from DC Water's Drinking Water Division at 202-612-3440.

Until all sources of lead in drinking water have been removed, pregnant women and children under the age of six should use filtered tap water for drinking and cooking. This includes water used for making infant formula, beverages and ice. Filters should be certified to meet NSF Standard 53 for lead removal. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791), epa.gov/safewater/lead and dcwater.com/lead.

Download our brochure

TIPS TO REDUCE LEAD in DRINKING WATER

dcwater.com/news/factsheet/pdfs/TipstoReduceLead.pdf

District of Columbia Drinking Water Analysis Data for 2014

The tables in the following section represent the levels of regulated and unregulated water quality parameters detected in samples that were collected in 2014. These parameters were detected above the Environmental Protection Agency's (EPA) analytical method detection limit. The test results compare the quality of your tap water to federal standards for each parameter, where applicable. For most of the results, you will see the unit of measurement, the EPA's regulatory limits, and the range of detected values. For regulated contaminants, we have also provided the typical contaminant sources. Please note that the monitoring frequency of each parameter varies.

The water quality test results indicate that your drinking water met all of the EPA's drinking water standards in 2014. For testing results from previous years, please visit dcwater.com/waterquality/waterquality_reports.cfm.

DISTRICT OF COLUMBIA DRINKING WATER ANALYSIS DATA FOR 2014

As you review the test results in the following section, you may find terms and abbreviations with which you are not familiar. Below is a reference guide to help you better understand the terms and abbreviations used in this report.

Abbreviations and Definitions

AL (Action Level):
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Other requirements may include additional testing, public notification or capital improvements. The AL is not equivalent to a maximum contaminant level or MCL (see definition below).

$CaCO_3$: Calcium carbonate.

EPA (Environmental Protection Agency):
An agency of the U.S. federal government which was created for the purpose of protecting human health and the environment, including drinking water, by writing and enforcing regulations based on laws passed by Congress.

Haloacetic Acids (5):
The five haloacetic acid species required to be monitored by EPA.

MRDL (Maximum Residual Disinfectant Level):
The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal):
The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

MCLG (Maximum Contaminant Level Goal):
The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL (Maximum Contaminant Level):
The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

NA: Not applicable.

ND: Not detected.

NH_3-N:
Measurement of ammonia in the form of nitrogen.

NO_2-N:
Measurement of nitrite in the form of nitrogen.

NTU (Nephelometric Turbidity Units):
Turbidity measurement using an instrument called a nephelometer, which measures the intensity of light scattered by suspended matter in the water.

pCi/L (picocuries per liter): Measure of radioactivity.

ppm:
parts per million. Equivalent to a drop of water in 50 liters of liquid.

ppb:
parts per billion. Equivalent to half a teaspoon of water in one Olympic-size swimming pool.

ppt:
parts per trillion. Equivalent to a drop of water in 20 Olympic-size swimming pools.

TT (Treatment Technique):
A required process intended to reduce the level of a contaminant in drinking water.

SMCL (Secondary Maximum Contaminant Limit):
Established by EPA as non-mandatory water quality standards only as guidelines to assist public water systems in managing drinking water for aesthetic qualities, such as taste, color and odor. These contaminants are not considered to present a risk to human health at the SMCL.

Turbidity:
A measure of the cloudiness of water. Turbidity is a good indicator of the effectiveness of the water treatment system. Turbidity in excess of 5 NTU is noticeable to the average person.

TEST RESULTS ⟶

DISTRICT OF COLUMBIA DRINKING WATER ANALYSIS DATA FOR 2014

Regulated Contaminants

WASHINGTON AQUEDUCT WATER TREATMENT PLANT PERFORMANCE

	Units	EPA Limits		DC Drinking Water	Description / Typical Sources of Contaminants
		MCLG	MCL or TT		
Turbidity	NTU	NA	TT = 1 (maximum)	(maximum hourly) 0.09	Turbidity is often caused by soil runoff
	% of monthly turbidity readings ≤ 0.3 NTU	NA	TT = 95% (minimum)	100%	
Total Organic Carbon (TOC)	% removal	NA	TT 0% to 45% removal	36% (lowest annual average) 30% to 51% (range of monthly averages)	Naturally present in the environment

WATER ENTERING DC WATER'S DISTRIBUTION SYSTEM

	Units	EPA Limits		DC Drinking Water		Description / Typical Sources of Contaminants
		MCLG	MCL	Highest	Range	
Inorganic Metals						
Arsenic	ppb	0	10	0.5	ND to 0.5	Erosion of natural deposits; Runoff from orchards
Barium	ppm	2	2	0.05	0.03 to 0.05	Erosion of natural deposits
Chromium	ppb	100	100	2	ND to 2	Erosion of natural deposits
Selenium	ppb	50	50	0.9	ND to 0.9	Erosion of natural deposits; Discharge from mines
Inorganic Anions						
Fluoride	ppm	4.0	4.0	0.9	0.6 to 0.9	Water additive which promotes strong teeth
Nitrate as Nitrogen	ppm	10	10	3	1 to 3	Runoff from fertilizer use; Erosion of natural deposits
Nitrite as Nitrogen	ppm	1	1	0.01	ND to 0.01	Runoff from fertilizer use; Erosion of natural deposits
Synthetic Organic Contaminants						
Atrazine	ppb	3	3	0.1	ND to 0.1	Herbicide runoff
Simazine	ppb	4	4	0.09	ND to 0.09	Herbicide runoff
Volatile Organic Contaminants						
None Detected						
Radionuclides[1]						
Gross alpha particles	pCi/L	0	15	9	ND to 9	Erosion of natural and man-made deposits

[1] Triennial radionuclide monitoring was performed in 2014.

Regulated Contaminants continued →

DISTRICT OF COLUMBIA DRINKING WATER ANALYSIS DATA FOR 2014

Regulated Contaminants continued

DC WATER'S DISTRIBUTION SYSTEM						
	Units	EPA Limits		DC Drinking Water		Description / Typical Sources of Contaminants
		MCLG	MCL or TT	Highest	Range	
Microbial Indicators						
Total Coliform Bacteria	% of total-coliform-positive samples	0	5% (maximum)	1.2%	0 to 1.2%	Naturally present in the environment
Fecal Coliform or E.coli Bacteria	Number positive	0	0	0	0	Human and animal fecal waste
DISINFECTANTS AND DISINFECTION BYPRODUCTS						
Chlorine	ppm	4 (MRDLG) (annual average)	4 (MRDL) (annual average)	3.1 (Highest running annual average)	0.0 to 4.1 (Range of single site results)	Water additive used to control microbes; Chlorine is combined with ammonia to form chloramine.
Total Trihalomethanes	ppb	NA	80 (4-quarter locational running average)	39 (Highest locational running annual average)	14 to 60 (Range of single site results)	By-product of drinking water disinfection.
Haloacetic Acids (5)	ppb	NA	60 (4-quarter locational running average)	27 (Highest location running annual average)	14 to 39 (Range of single site results)	By-product of drinking water disinfection.
LEAD AND COPPER (AT THE CUSTOMER'S TAP)						
	Units	EPA Limits		DC Drinking Water		Description / Typical Sources of Contaminants
		MCLG	Action Level	Samples above AL	90th Percentile	
Lead						
January-June 2014 Monitoring Period	ppb	0	15	0 of 111	2	Corrosion of household plumbing systems; erosion of natural deposits
July-December 2014 Monitoring Period	ppb	0	15	3 of 104	4	
Copper						
January-June 2014 Monitoring Period	ppm	1.3	1.3	0 of 111	0.082	Corrosion of household plumbing systems; erosion of natural deposits
July-December 2014 Monitoring Period	ppm	1.3	1.3	0 of 104	0.108	

DISTRICT OF COLUMBIA DRINKING WATER ANALYSIS DATA FOR 2014

Contaminants without Primary MCLs or Treatment Techniques

WATER ENTERING DC WATER'S DISTRIBUTION SYSTEM PARAMETER	UNITS	AVERAGE	RANGE
Parameter	Units	Average	Range
Aluminum	ppb	32	12 to 116
Bromide	ppm	ND	ND to 0.05
Calcium	ppm	38	24 to 57
Chloride	ppm	42	18 to 126
Copper at Point of Entry[2]	ppb	3	0.6 to 13
Iron	ppb	ND	ND to 20
Lithium	ppb	2	0.9 to 3
Magnesium	ppm	8	3 to 14
Manganese	ppb	0.5	ND to 2
Molybdenum	ppb	0.6	ND to 1
Nickel	ppb	1	0.6 to 2
N-Nitroso-di-butylamine (NDBA)	ppt	ND	ND to 2
N-Nitroso-dimethylamine (NDMA)	ppt	ND	ND to 5
Orthophosphate	ppm	2.4	2.0 to 2.8
Perchlorate	ppb	0.6	0.3 to 2.2
Potassium	ppm	3.0	2.2 to 4.2
Sodium	ppm	27	17 to 65
Strontium	ppb	167	90 to 256
Sulfate	ppm	44	31 to 71
THAA (HAA5) at Point of Entry[3]	ppb	24	16 to 36
Thorium	ppb	ND	ND to 0.7
Total Ammonia	ppm	0.7	ND to 1.0
Total DCPA (mono- & -di-acid degradates)	ppb	ND	ND to 0.1
Total Hardness	ppm	128	77 to 182
Total Hardness	grains/gal	7.5	4.5 to 10.6
TTHM at Point of Entry[3]	ppb	35	9.5 to 70
Vanadium	ppb	ND	ND to 1
Zinc	ppb	1	ND to 23

[2] Results represent levels entering DC Water's distribution system and are distinct from lead and copper compliance monitoring conducted in residential homes.
[3] Monitoring for these parameters is not required at entry points, but is required in the distribution system

Other Water Quality Parameters

DC WATER'S DISTRIBUTION SYSTEM & TAP MONITORING RESULTS			
Parameter	Units	Average	Range
Alkalinity	ppm	62	42 to 90
Aluminum - Total	ppm	0.006	0 to 0.03
Ammonia - Free	ppm as NH_3-N	0.16	0.01 to 0.41
Calcium Hardness	ppm as $CaCO_3$	91	54 to 140
Calcium Hardness	Grains per gallon as $CaCO_3$	5.3	3.2 to 8.2
Dissolved Orthophosphate	ppm	2.36	1.82 to 2.92
Iron[4]	ppm	0.07	0 to 0.34
Nitrite	ppm as NO_2-N	0.04	0 to 0.472
pH	--	7.64	7.45 to 7.76
Temperature	Degrees Fahrenheit	64	34 to 85
Total Dissolved Solids	ppm	190	104 to 263

[4] The secondary maximum contaminant level (SMCL) for iron is 0.3 ppm. SMCLs are established by EPA only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, or odor. These contaminants are not considered to present a risk to human health at the SMCL

DISTRICT OF COLUMBIA DRINKING WATER ANALYSIS DATA FOR 2014

In 2014, DC Water tested the drinking water for a series of unregulated contaminants in accordance with EPA's third round of the Unregulated Contaminant Monitoring Rule (UCMR3). Unregulated contaminants are those that do not yet have a drinking water standard or maximum allowable concentration set by EPA. The monitoring of unregulated contaminants will help EPA evaluate the occurrence of these compounds and determine if they should be regulated. As part of DC Water's UCMR3 monitoring program, samples were collected and analyzed quarterly in 2014 (January, April, July, and October), and results are now available on EPA's Safe Drinking Water Accession and Review System (SDWARS). During each sampling event, DC Water collected a total of 4 samples – 2 samples from the distribution system and 2 samples at points of entry from the treatment plants. The contaminants detected during these quarterly sampling events are listed below.

As our customers, you have a right to know that these data are available. If you are interested in reviewing the results or would like additional information about the UCMR3 monitoring program, please visit our website at dcwater.com/drinking_water/issues/default.cfm or visit EPA's UCMR3 website at water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm#ucmr2013.

Detected Unregulated Compounds (ppb)

Compound	Date Sampled	Dalecarlia Water Treatment Plant Entry Point	Distribution System Sample 1 (Dalecarlia)	McMillan Water Treatment Plant Entry Point	Distribution System Sample 2 (McMillan)	Common Sources
Chlorate	January 2014	210	200	160	160	Byproduct of the water disinfection process and ingredient in herbicides and explosives.
	April 2014	140	170	120	120	
	July 2014	430	470	250	250	
	October 2014	330	340	410	410	
Chromium	July 2014	0.20	No Detection	0.24	No Detection	Naturally ocurring element that can be found in soils, plants, rocks, water and animals.
	October 2014	0.26	0.31	0.36	0.32	
Chromium - 6	January 2014	0.091	0.077	0.082	0.074	Ingredient in some paint and industrial products, such as metal coatings
	April 2014	0.092	0.12	0.075	0.077	
	July 2014	0.098	0.10	0.10	0.10	
	October 2014	0.063	0.076	0.077	0.079	
Molybdenum	October 2014	1.0	1.1	1.2	1.2	Naturally-occurring metal that can be found in rocks and soil. It is also present in plants, animals and bacteria. Molybdenum is most commonly used in the production of structural steel, stainless steel, cast iron and other alloys.
Strontium	January 2014	160	140	130	120	Occurs naturally in the environment but can be released at higher levels from industrial processes, such as coal burning and fertilizer manufacturing.
	April 2014	130	120	120	120	
	July 2014	24	210	200	190	
	October 2014	220	230	260	260	
Vanadium	April 2014	0.22	0.20	No Detection	No Detection	Occurs naturally in many minerals and fossil fuel deposits. The primary industrial use is strengthening steel.
	July 2014	1.3	0.85	0.57	0.55	
	October 2014	0.60	0.57	0.40	0.39	

drink tap

dcwater.com/tap

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GET INVOLVED

The DC Water Board of Directors conducts regularly scheduled board meetings that are open to the public, generally on the first Thursday of each month, 9:30 AM at the Blue Plains Facility, 5000 Overlook Ave, SW, Washington, DC 20032.

Please visit dcwater.com or contact the Office of the Board Secretary at (202) 787-2330 to confirm a meeting time and location.