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

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Ser J4
10 June 2014

From: Public Works Officer, Joint Base Anacostia-Bolling (JBAB)
To: JBAB-Anacostia Tenant Commands

Subj: 2013 ANNUAL DRINKING WATER QUALITY REPORT, JBAB-ANACOSTIA, PUBLIC WATER SYSTEM (PWS) #DC0000004

1. In accordance with federal drinking water regulations, Joint Base Anacostia-Bolling (JBAB) is providing you with the 2013 Annual Drinking Water Quality Report for the Anacostia Public Water System, enclosure (1), and District of Columbia Water and Sewer Authority's (DC Water's) 2014 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. The water being served at JBAB-Anacostia met federal Safe Drinking Water Act requirements in 2013 and continues to meet those requirements.

3. JBAB-Anacostia 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.

4. JBAB-Anacostia is required to monitor the drinking water distribution system for specific contaminants at JBAB-Anacostia. The results of routine monitoring are an indicator of whether or not your drinking water meets Safe Drinking Water Act standards. All monitoring activities conducted on JBAB-Anacostia met Safe Drinking Water Act standards in calendar year (CY) 2013.

5. The 2013 Annual Water Quality Report (Enclosure 1) provides information regarding drinking water monitoring conducted on JBAB-Anacostia. DC Water's 2014 Drinking Water Quality Report (Enclosure 2) provides the monitoring data for DC Water for 2013.

These enclosures provide important information about the following topics:

a. Drinking Water Quality Monitoring Results for JBAB-Anacostia conducted in CY 2013;

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 Environmental Program at 202-404-1273.

Sincerely,

Lt Col Kristen Bakotic

KRISTEN D. BAKOTIC, Lt. Col., USAF
Public Works Officer, Joint Base Anacostia-Bolling

Enclosures: (1) 2013 Annual Drinking Water Quality Report for JBAB-Anacostia
(2) District of Columbia Water and Sewer Authority (DC Water) 2014 Drinking Water Quality Report

2013 ANNUAL DRINKING WATER QUALITY REPORT

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

JBAB-Anacostia distributes drinking water to residential and non-residential buildings on the installation. This water is supplied to JBAB-Anacostia 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 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 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 met EPA standards for lead in 2013 (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

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. 2013 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 Contaminates
		MCLG	MCL or TT	Highest	Range		
Total Coliform Bacteria	# of positive samples	0	1 positive sample/month	1*	0	No	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

*For systems that analyze less than 40 samples per month, no more than 1 sample per month may be positive for total coliforms. In July 2013 there was a positive for total coliforms at Building 413. As required, three repeat samples were collected at the following designated locations: Building 413, Building 414 and Building 418. None of these samples had a positive for total coliform. In August 2013, routine samples were collected and no positive coliforms were reported.

Disinfectants							
	Units	EPA Limits		JBAB-Anacostia Drinking Water		Violations	Description/Typical Sources of Contaminates
		MCLG	MCL or TT	Highest	Range		
Chlorine	ppm	4 (MRDLG) annual average	4.0 (MRDL) annual average	2.0 running annual average	0.03-3.80*	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 contain 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 Contaminates
		MCLG	MCL or TT	Highest	Range		
Total Trihalomethanes-Monitoring Period 2013	ppb	N/A	80	47	22-74	No	Trihalomethanes are a byproduct of drinking water disinfection
Haloacetic Acids-Monitoring Period 2013	ppb	N/a	60	33	12-67*	No	Haloacetic acids are a byproduct of drinking water disinfection

*If the Locational Running Annual Average (LRAA) is > 60 ppb, the a violation occurred. For 2013, the LRAA was 33 ppb, therefore a violation had not occurred although the high range of results is above the MCL.

Nitrate and Nitrite							
	Units	EPA Limits		JBAB-Anacostia Drinking Water		Violations	Description/Typical Sources of Contaminates
		MCLG	MCL or TT	Highest	Range		
Nitrate	ppm	10	10	2.3	1.3-2.3	No	Runoff from fertilizer use; erosion from natural deposits
Nitrite	ppm	1	1	0.44	<0.20-0.44	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 Environmental Program, 370 Brookley Avenue SW, Washington, DC 20032
Phone: 202-404-1273

dc water is life®

2014 DRINKING WATER QUALITY REPORT

– Summarizing 2013 Water Quality Test Results

DEAR CUSTOMERS:

I am very pleased to present your 2014 Water Quality Report, which summarizes the information on the quality of the water delivered in 2013. There are few things as important to our public health than the availability of clean drinking water, and at DC Water we take our responsibility to distribute that water to your tap very seriously.

Tap water is subject to more stringent regulations than most products you can use at home - including bottled water. In the pages that follow, you'll learn how DC Water works to make sure the water we deliver meets those regulations and beyond. This includes the results of the thousands of water quality tests we performed in 2013. This report also includes a Special Notice of Availability of Unregulated Contaminant Monitoring Data for the results from the sampling performed during January and April 2014.

To download this report or view current test results, visit **dcwater.com/testresults**.

Sincerely,

George S. Hawkins

George S. Hawkins, General Manager

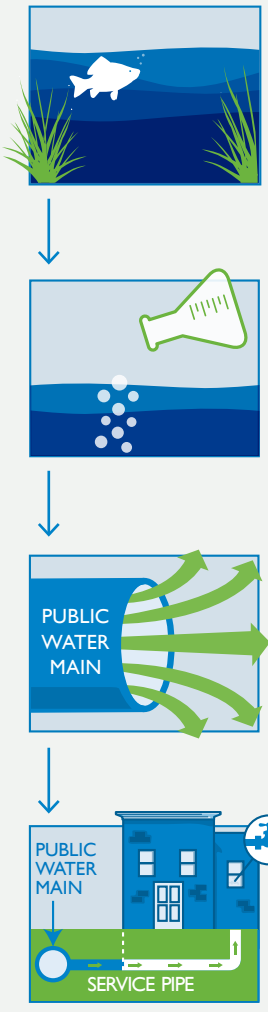
YOUR DRINKING WATER QUALITY

Your high-quality tap water continues to surpass all United States Environmental Protection Agency (EPA) drinking water standards. In 2013, DC Water collected more than 5,600 water samples from hydrants, commercial buildings and household taps throughout the District of Columbia and conducted over 41,000 tests. DC Water maintains over 1,300 miles of pipe and provides drinking water to more than 600,000 residents and businesses throughout the District of Columbia and portions of Maryland and Virginia. This report provides an annual snapshot of regulatory and voluntary water testing programs that help safeguard our drinking water supply.

DC Water is committed to protecting its water supply. 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).

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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.

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.
- Dispose of household waste, grease and motor oil properly.
- Report spills that could potentially enter the waterways.
- Do not flush pharmaceuticals down the toilet or drain.

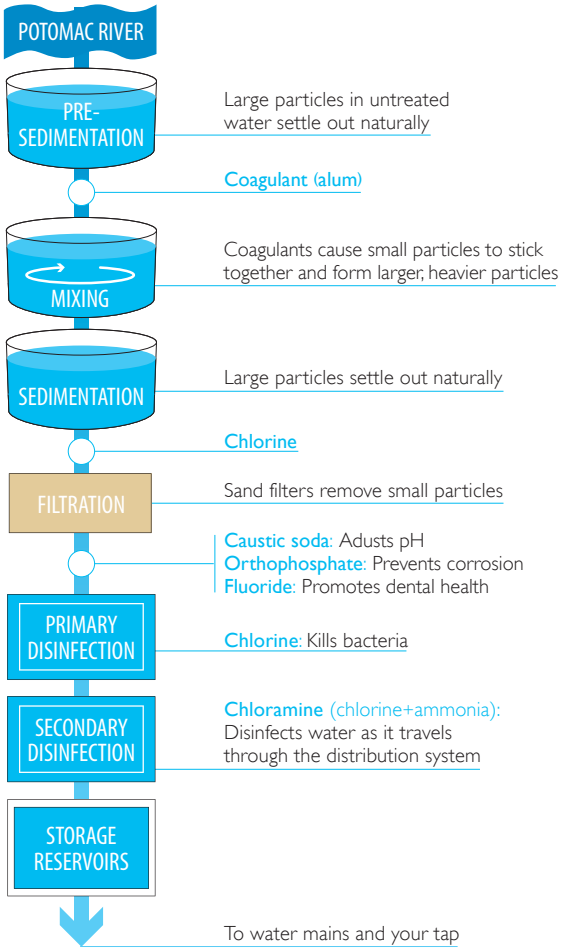
For more information about protecting the Potomac River, visit the Potomac Drinking Water Source Protection Partnership at **potomacdwspp.org**. Contact the District of Columbia 311 Call Center to report a spill or for information about waste and pharmaceutical disposal.

DRINKING WATER TREATMENT

The Washington Aqueduct collects water from the Potomac River and treats the water at the Dalecarlia and McMillan Treatment Plants. The treatment process includes sedimentation, filtration, fluoridation, pH adjustment, disinfection using free chlorine and chloramine (chlorine + ammonia), and corrosion control using orthophosphate.

Chloramine is a common drinking water disinfectant and helps to ensure the quality of drinking water as it travels from the treatment plant to customer taps. However, 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**.

Water Treatment Process
Dalecarlia and McMillan Water Treatment Plants



THE POTOMAC RIVER – YOUR DRINKING WATER SOURCE

Drinking water for the District of Columbia comes from the Potomac River, a "surface water" supply. The US Army Corps of Engineers, Washington Aqueduct collects water from the Potomac River and is responsible for treatment to meet 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 District's drinking water distribution system. To view the Washington Aqueduct's Annual Water Quality Report, visit **dcwater.com/wadreport**.

The sources of drinking water (both tap water and bottled water) includes 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, and can pick up substances resulting from the presence of animals or from 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.

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/pubs**, under 2002.

For more information, contact the ICPRB at (301) 984-1908.

(The data tables show EPA standards and the levels of contaminants detected in the District of Columbia in 2013 above EPA's method detection limit.)

2013 Results Table / Water Quality Analysis Data for 2013 The following tables represent levels of regulated and unregulated water quality parameters. These parameters were detected above the Environmental Protection Agency (EPA)'s analytical method detection limit from samples collected in 2013.

Abbreviations and Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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 1 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.

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) 0.09 (hourly)	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	38% (lowest annual average) 11% to 52% (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 METAL						
Antimony [2]	ppb	6	6	0.1	ND to 0.1	Discharge from fire retardants; ceramics; electronics; solder
Arsenic	ppb	0	10.	0.8	ND to 0.8	Erosion of natural deposits; runoff from orchards
Barium	ppm	2	2	0.04	0.02 to 0.04	Erosion of natural deposits
Chromium	ppb	100	100	4	ND to 4	Erosion of natural deposits
Selenium	ppb	50	50	1	ND to 1	Erosion of natural deposits; discharge from mines
INORGANIC ANIONS						
Fluoride	ppm	4.0	4.0	0.9	0.3 to 0.9	Water additive which promotes strong teeth
Nitrate [1] as Nitrogen	ppm	10	10	3	0.5 to 3	Runoff from fertilizer use; erosion of natural deposits
Nitrite [1] as Nitrogen	ppm	1	1	0.02	ND to 0.02	Runoff from fertilizer use; erosion of natural deposits
SYNTHETIC ORGANIC CONTAMINANTS						
Atrazine [2]	ppb	3	3	0.07	ND to 0.07	Herbicide runoff
Dalapon	ppb	200	200	1.2	ND to 1.2	Herbicide runoff
VOLATILE ORGANIC CONTAMINANTS						
None Detected						
RADIONUCLIDES [3]						
Beta/Photon Emitters [2]	pCi/L	50	0	3.2	ND to 3.2	Decay of natural and man-made deposits
Combined Radium	pCi/L	0	5	1.2	ND to 1.2	Erosion of natural deposits
Uranium [2]	ppb	30	0	0.1	ND to 0.1	Erosion of natural deposits

[1] The levels shown for this parameter were derived from both compliance data and routine process control data.

[2] This parameter is included because it was detected below the EPA method detection limit for reporting but above the laboratory method reporting limit.

[3] Triennial radionuclide monitoring was performed in 2011.

Regulated Contaminants continues

(The data tables show EPA standards and the levels of contaminants detected in the District of Columbia in 2013 above EPA's method detection limit.)

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)	3.00 (Highest running annual average)	0.0 to 4.2 (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)	42 (Highest locational running annual average)	14 to 63 (Range of single site results)	By-product of drinking water disinfection
Haloacetic Acids (5)	ppb	NA	60 (4-quarter locational running average)	31 (Highest locational running annual average)	8 to 42 (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 2013 Monitoring Period	ppb	0	15	2 of 110	4	Corrosion of household plumbing systems; erosion of natural deposits
July-December 2013 Monitoring Period	ppb	0	15	4 of 113	6	
COPPER						
January-June 2013 Monitoring Period	ppm	1.3	1.3	0 of 110	0.1	Corrosion of household plumbing systems; erosion of natural deposits
July-December 2013 Monitoring Period	ppm	1.3	1.3	0 of 113	0.1	

Contaminants without Primary MCLs or Treatment Techniques

WATER ENTERING DC WATER'S DISTRIBUTION SYSTEM

Parameter	Units	Average	Range
Aluminum	ppb	34	11 to 91
Calcium	ppm	38	22 to 54
Chlorate	ppb	330	200 to 440
Chloride	ppm	32	18 to 82
Chromium-6	ppb	0.07	0.04 to 0.10
Cobalt	ppb	ND	ND to 0.3
Copper[4]	ppb	3.0	0.5 to 27
Iron	ppb	ND	ND to 22
Lead[4]	ppb	0.1	ND to 1.0
Lithium	ppb	2.1	1.2 to 4.0
Magnesium	ppm	7	1 to 13
Manganese	ppb	0.6	ND to 3.5
Molybdenum	ppb	0.6	ND to 1.1
Nickel	ppb	1.9	1.4 to 2.7
N-Nitroso-di-n-propylamine (NDPA)	ppt	ND	ND to 5
N-Nitroso-dibutylamine (NDBA)	ppt	ND	ND to 6
Orthophosphate	ppm	2.4	2.0 to 3.0
Perchlorate	ppb	0.4	0.2 to 1.4
Sodium	ppm	22	15 to 42
Strontium	ppb	171	94 to 261
Sulfate	ppm	49	32 to 73
Thorium	ppb	ND	ND to 0.1
Total Ammonia	ppm	0.7	0.02 to 1.1
Total Hardness	ppm	124	79 to 179
Total Hardness	Grains per gallon	7.3	4.6 to 10.5
Vanadium	ppb	0.5	ND to 1.3
Zinc	ppb	0.8	0.2 to 3.8

[4] Results represent levels entering DC Water's distribution system and are distinct from lead and copper compliance monitoring conducted in residential homes.

OTHER WATER QUALITY PARAMETERS — DC WATER'S DISTRIBUTION SYSTEM AND TAP MONITORING RESULTS

Parameter	Units	Average	Range
Alkalinity	ppm	63	42 to 92
Aluminum - Total	ppm	0.008	0 to 0.05
Ammonia - Free	ppm as NH_3-N	0.16	0.04 to 0.28
Calcium Hardness	ppm as $CaCO_3$	87	61 to 126
Calcium Hardness	Grains per gallon $CaCO_3$	5.1	3.6 to 7.4
Chromium-6	ppb	0.06	0.04 to 0.09
Dissolved Orthophosphate	ppm	2.34	1.84 to 2.96
Iron[5]	ppm	0.07	0 to 0.73
Nitrite	pm as NO_2-N	0.02	0 to 0.308
pH	—	7.54	7.45 to 7.74
Temperature	Degrees Fahrenheit	65	43 to 87
Total Dissolved Solids	ppm	178	137 to 237

[5] The secondary maximum contaminant level (SMCL) for iron is 0.3 ppm. SMCLs are established by EPA as non-mandatory water quality standards 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.

Special Notice of Availability of Unregulated Contaminant Monitoring Data

DC Water is testing drinking water for unregulated contaminants in accordance with EPA's third round of the Unregulated Contaminant Monitoring Rule (UCMR3). Unregulated contaminants do not yet have a maximum allowable concentration set by EPA. The testing 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 are collected and analyzed quarterly in 2014 (January, April, July, and October), and results are posted on EPA's Safe Drinking Water Accession and Review System (SDWARS). During each sampling event, DC Water collects 4 samples – 2 samples from the distribution system and 2 samples at points of entry from the treatment plants. Contaminants detected during the January and April sampling events are listed below.

As our customers, you have a right to know that these data are available. If you are interested in examining 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

(parts per billion)

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	
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	
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	
Vanadium	April 2014	0.22	0.20	ND	ND	Occurs naturally in many minerals and fossil fuel deposits. The primary industrial use is strengthening steel.

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 U.S. 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).

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. 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. 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 may wish to have your water tested. Until all sources of lead in drinking water have been removed, pregnant or nursing 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.

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.

DC WATER CONTACT INFORMATION

dcwater.com

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

Additional contacts:

US Army Corps of Engineers
Washington Aqueduct ..... (202) 764-2753
washingtonaqueduct.nab.usace.army.mil

EPA Safe Drinking Water Hotline ..... (800) 426-4791
epa.gov/safewater

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

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

이 안내지에는 귀하께서 드시는 식수의 질에 대한 중요한 정보가 들어있습니다. 이해하시는데 도움이 필요하시거나 질문이 있으시면 한인봉사센타 (Korean Community Service Center: KCSC) 에서 도와드릴 것이오니, 240-683-6663 으로 연락 주시기 바랍니다.

本手冊備有有關飲用水的信息，若在閱讀的過程中需要幫忙解釋請與美京中華基督教會聯絡。電話是：202-898-0061

Copias en español de estes folleto están a la disposición en las bibliotecas públicas y en las clínicas del Departamento de Salud del District of Columbia, o llamando a la Oficina de Asuntos Públicos de la Autoridad de Agua y Desagües al teléfono (202) 787-2200.

drink tap
dcwater.com/tap

TapIt
Metro D.C.

TapIt Metro D.C. is a network of more than 400 businesses in the metro region that provide free tap water to refill a reusable bottle. Download the free **TapIt Metro D.C.** app to find locations or visit **freetapwater.org** for a map of partners.

ANDROID APP ON Google play

Available on the iPhone App Store

FOR WATER QUALITY TIPS, DOWNLOAD

DC Water's **HOUSEHOLD WATER QUALITY GUIDE**

dcwater.com/homeguide or call 202-787-2200 to request a mailed copy.

GET INVOLVED

The DC Water Board of Directors conducts business meetings that are open to the public, generally on the first Thursday of each month 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.

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