2022 Water Quality Report

Joint Base Anacostia-Bolling

Dear Valued Customer,

Joint Base Anacostia-Bolling (JBAB) is committed to safeguarding the health of the installation's personnel, their families, and anyone who may utilize the JBAB Public Water System (PWS). Ensuring safe drinking water is a top priority for the JBAB Command Team and the 2022 sampling results presented in this report demonstrate that the installation's drinking water is regulated by the Environmental Protection Agency (EPA) and met the water quality standards established by the Safe Drinking Water Act. Please take this opportunity to learn more about your drinking water and if you have any questions, concerns, or suggestions, please call or email Bio Environmental Element. Contact information is provided at the end of this report.

Catherine M. Logan

Catherine M. Logan, Colonel, USAF
Commander, JBAB & 11th Wing

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE:

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that 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.

The sources of tap water include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal or human activity.

PRESENT IN SOURCE WATER INCLUDES:

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

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 EPA Safe Drinking Water Hotline at 1-800-426-4791.

The Source of Your Drinking Water

Drinking water for the District of Columbia (DC) is sourced from the Potomac River, a surface water supply. DC Water purchases the treated drinking water from the U.S. Army Corps of Engineers, Washington Aqueduct (Aqueduct), and then sells the finished water to JBAB. The Aqueduct withdraws approximately 140 million gallons of water each day from the Potomac River at the Great Falls and Little Falls intakes and treats the water at two treatment plants, Dalecarlia and McMillan. The Aqueduct filters and disinfects water from the Potomac River to meet safe drinking water standards. The treatment process includes sedimentation, filtration, fluoridation, pH adjustment, primary disinfection using free chlorine, secondary disinfection with chloramines through the addition of ammonia, and corrosion control with orthophosphate. DC Water conducts water quality monitoring throughout the city to ensure that the water it provides meets safe drinking water quality standards; for more information on the drinking water treatment process, visit the Aqueduct's website at http://www.nab.usace.army.mil/Missions/WashingtonAqueduct.aspx.

DC Water distributes the treated drinking water to more than 700,000 residential, commercial, and governmental customers in the District of Columbia, Maryland and Virginia.

EPA Region III, as the drinking water primacy agency for the District of Columbia, funded the update and completion of the Source Water Assessment of the Potomac River watershed in early 2020. Horsley Witten was contracted to consult with public water utilities and state agencies to create this update. This "report" is in the form of an innovative web-based storyboard containing interactive links and a visual representation of the updated information. The intention was to provide the resource managers, scientists, and interested citizens with more interactive, user friendly way of assessing the data through a GIS platform to better understand source water protection. The storyboard can be found here: https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=25bd8df30dcb4f729b8c617d1e0ac4c9

WATER QUALITY ANALYSIS DATA

In order for the Aqueduct to be aware of the initial concentration of *Giardia* and *Cryptosporidium* contaminants in the surface water prior to treatment, it performs regular monitoring.

Giardia

The Aqueduct monitored for *Giardia* in the source water (Potomac River) quarterly in 2022. *Giardia* cysts were detected in two samples collected in January and October with concentrations ranging from 0.381 to 0.455 cysts per liter.

Cryptosporidium

The Aqueduct monitored for *Cryptosporidium* in the source water (Potomac River) quarterly in 2022. *Cryptosporidium* oocysts were detected in two samples collected in January and October with concentrations ranging from 0.0909 to 0.0952 oocysts per liter.

Cryptosporidium is a microbial pathogen found in the surface water throughout the U.S. Although filtration removes *Cryptosporidium,* the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these microorganisms in the Potomac River. Current test methods do not allow us to determine if the microorganisms are dead or if they are capable of causing disease. Ingestion of *Cryotosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of the infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life threatening illness. We encourage immuno-comprised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

SPECIAL PRECAUTIONS

Some individuals may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as those with cancer and undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their health care providers. The U.S. 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 at **1–800–426–4791**.

Per- and polyfluoroalkyl substances (PFAS) compounds

The Aqueduct conducted a proactive sampling event on October 18, 2022, to monitor for per- and polyfluoroalkyl substances (PFAS) compounds in finished water from its two treatment plants using U.S Environmental Protection Agency (EPA)-approved methodologies to assess concentrations ahead of forthcoming EPA-proposed regulations (https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas). DC water will continue voluntary quarterly monitoring in 2023 and conduct the Fifth Unregulated Contaminant Monitoring Rule required in 2024. The Aqueduct October 2022 data are summarized below. DC Water also summerarized data from other regional entities that use the Potomac River and therefore are likely representative of the District of Columbia's drinking water (https://www.dcwater.com/pfas-and-drinking-water).

Per- and polyfluoroalkyl substances (PFAS) Test Results of Washington Aqueduct October 2022 Treated Water Samples (measured as parts per trillion – ppt)

Chemical Group	Average	Range	Method Reporting Limit	EPA's Proposed Maximum Contaminant Level	EPA's 2022 Health Advisory Level
Perfluorooctanesulfonic acid (PFOS)	2.5 ppt	Non-detect to 2.9 ppt	2.0 ppt	4.0 ppt[1]	0.02 ppt (interim)
Perfluorooctanoic acid (PFOA)	2.4 ppt	2.2 to 2.5 ppt	2.0 ppt	4.0 ppt[1]	0.004 ppt (interim)
Perfluorobutanesulfonic acid (PFBS)	2.7 ppt	2.4 to 3.0 ppt	2.0 ppt	Hazard Index[2] of 1.0	2,000 ppt (final)
Hexafluoropropylene Oxide (HFPO) Dimer Acid and its Ammonium Salt (GenX)	Non-detect	Non-detect	2.0 ppt		10 ppt (final)

1 parts per trillion
2 The Hazard Index is a tool used to evaluate potential health risks from exposure to chemical mixtures. The hazard index for PFAS is the combination of Perfluorononanoic acid (PFNA), Perfluorobutanesulfonic acid (PFBS), Hexafluoropropylene Oxide (HFPO) Dimer Acid and its Ammonium Salt (GenX) ratios of concentration in the sample to the level determined not to cause health effects and is 1.0.

" The Great Falls of the Potomac" at Great Falls Park

Water Analysis Data

District of Columbia Drinking Water Analysis Data for 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) 0.19 (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 ratio	NA	TT = > 1 (annual average)	1.24 (lowest annual average) Annual average must be greater than 1.00 to be compliant		Naturally present in the environment
Water Entering DC Water's Distribution System						
Inorganic Metals						
	Units	**EPA Limits**		**DC Drinking Water**		**Description / Typical Sources of Contaminants**
		MCLG	**MCL**	**Highest**	**Range**	
Arsenic	ppb	0	10	0.4	0.3 to 0.4	Erosion of natural deposits; Runoff from orchards
Barium	ppm	2	2	0.05	0.04 to 0.05	Erosion of natural deposits
Inorganic Anions						
Fluoride	ppm	4.0	4.0	0.9	0.7 to 0.9	Water additive which promotes strong teeth
Nitrate as Nitrogen	ppm	10	10	2	0.5 to 2	Runoff from fertilizer use; Erosion of natural deposits
Synthetic Organics						
Atrazine	ppb	3	3	0.2	ND to 0.2	Herbicide runoff
Volatile Organic Contaminants						
None detected other than Total Trihalomethanes (see table below for those results)						
Radionuclides[1]						
Beta/photon emitters	pCi/L	0	50	4	ND to 4	Erosion of natural deposits

[1] Triennial radionuclide monitoring was performed in 2020.

Water Analysis Data Continued..

DC Water's Distribution System							
Disinfectants and Disinfection Byproducts							
	Units	**EPA Limits**		**Running Annual Average**	**Range**	**Violation**	**Description / Typical Sources of Contaminants**
		MCLG	**MCL**				
Chlorine	ppm	4 (MRDLG) (annual average)	4 (MRDL) (annual average)	3.0 (Highest running annual average)	0.2 to 4.0 (Range of single site results)	No	Water additive used to control microbes; Chlorine is combined with ammonia to form chloramine.
Total Trihalomethanes (TTHMs)	ppb	NA	80 (4-quarter locational running average)	48 (Highest locational running annual average)	15 to 71 (Range of single site results)	No	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	ppb	NA	60 (4-quarter locational running average)	44 (Highest location running annual average)	15 to 62 (Range of single site results)	No	By-product of drinking water disinfection.
Lead and Copper (at the customer's tap)							
	Units	**EPA Limits**		**DC Drinking Water**		**Violation**	**Description / Typical Sources of Contaminants**
		MCLG	**Action Level**	**Samples above AL**	**90th Percentile**		
Lead							
January-June Monitoring Period	ppb	0	15	1 of 117	2	No	Corrosion of household plumbing systems; erosion of natural deposits
July-December Monitoring Period	ppb	0	15	0 of 108	2	No	
Copper							
January-June Monitoring Period	ppm	1.3	1.3	0 of 117	0.103	No	Corrosion of household plumbing systems; erosion of natural deposits
July-December Monitoring Period	ppm	1.3	1.3	0 of 108	0.091	No	

*** Lead and Copper data from DC Water's distribution system, not Joint Base Anacostia Bolling PWS.**

AWARENESS: 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. JBAB PWS is 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 tap for 30 seconds to 2 minutes before using the water for drinking and cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-(800)-424-5323 or at **http://www.epa.gov/safewater/lead.**

Water Analysis Data Continued.

Detected Contaminants without Primary MCLs or Treatment Techniques Entering DC Water's Distribution System					
Parameter	Units	Average	Range		
Aluminum	ppb	40	14	to	95
Calcium	ppm	36	21	to	51
Chloride	ppm	39	17	to	98
Iron	ppb	ND	ND	to	40
Lithium	ppb	2	1	to	3
Magnesium	ppm	8	5	to	11
Manganese	ppb	0.5	ND	to	1
Metolachlor	ppb	0.1	ND	to	0.2
Molybdenum	ppb	ND	ND	to	0.9
Nickel	ppb	0.4	ND	to	0.7
Orthophosphate (as PO_4)	ppm	2.5	1.9	to	3.7
Perchlorate	ppb	0.3	0.2	to	0.4
Potassium	ppm	2.8	2.7	to	2.8
Sodium	ppm	28	25	to	31
Strontium	ppb	185	132	to	257
Sulfate	ppm	42	31	to	56
HAA5 at Point of Entry[1]	ppb	30	16	to	41
Total Ammonia	ppm	0.8	ND	to	1
Total Hardness	ppm	123	83	to	173
Total Hardness	grains/gal	7	5	to	10
TTHMs at Point of Entry[1]	ppb	39	12	to	67
Vanadium	ppb	ND	ND	to	1
Zinc	ppb	ND	ND	to	2

[1] Monitoring for these parameters is not required at entry points, but is required in the distribution system

Abbreviations and Definitions

AL = Action Level. The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement 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).

HAA = Haloacetic acids
HAA5 = Haloacetic acids (5) = The five haloacetic acid species regulated by EPA.
MRDL = Maximum Residual Disinfectant Level. The highest level of a disinfectant that is 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. MDRLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
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 = Non-Detectable

NTU = Turbidity is measured with an instrument called a nephelometer, which measures the intensity of light scattered by suspended matter in the water. Measurements are given in nephelometric turbidity units (NTUs).
pCi/L = Picocuries per liter (a measure of radioactivity)
PO_4 = Phosphate
ppm = parts per million
ppb = parts per billion
ppt = parts per trillion
TT = Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.
TTHMs = Total trihalomethanes
Turbidity = A measure of the cloudiness of water. We measure turbidity because it is a good indicator of the effectiveness of the water treatment system. Turbidity in excess of 5 NTU is just noticeable to the average person.

ANACOSTIA REGULATED SUBSTANCES 2022:

SUBSTANCE (UNITS)	MCLG	TT/MCL	Highest
Total Coliform Bacteria	0	0	0
E. Coli Bacteria	0	0	0

SUBSTANCE (UNITS)	MRDLG	MRDL	HIGHEST ANNUAL AVERAGE	RANGE
Chlorine (ppm)	4	4	1.9	0.02 - 3.7

SUBSTANCE (UNITS)	MCLG	MCL	HIGHEST Locational Running ANNUAL AVERAGE	RANGE
Haloacetic Acids (ppb)	N/A	60	42	12.3 - 73.2
Total Trihalomethanes (ppb)	N/A	80	62	17.6 - 84.50

SUBSTANCE (UNITS)	MCLG	MCL	ANNUAL AVERAGE	RANGE
Nitrate (ppm)	10	10	1.99	1.73 - 2.21
Nitrite (ppm)	1	1	0.09	ND - 0.20

TABLE 1- Anacostia Side

VIOLATION	TYPICAL SOURCE	COMMENTS
No	Coliforms are naturally present in the environment; as well as feces; fecal coliforms and E. coli. only come from human and animal fecal waste.	No samples tested positive for Total Coliform and/or E. Coli. Bacteria in 2022 on the Anacostia Side of JBAB.
No		

VIOLATION	TYPICAL SOURCE	COMMENTS
No	Water additive that protects against microbial contamination. Chlorine is combined with ammonia to form chloramine.	Chlorine levels were not always within required standards for 2022, but heterotrophic plate counts (HPC) were performed for points with low chlorine.

VIOLATION	TYPICAL SOURCE	COMMENTS
No	Haloacetic acids are a byproduct of drinking water disinfection.	Disinfection byproducts remained within required standards for 2022.
No	Trihalomethanes are a byproduct of drinking water disinfection.	

VIOLATION	TYPICAL SOURCE	COMMENTS
No	Runoff from fertilizer use; erosion from natural deposits	Nitrates and nitrites are inorganic chemicals composed of nitrogen and oxygen. Samples were in the required parameters for 2022.
No	Runoff from fertilizer use; erosion from natural deposits.	

BOLLING REGULATED SUBSTANCES 2022:

SUBSTANCE (UNITS)	MCLG	TT/MCL	HIGHEST
Total Coliform Bacteria	0	2 positive/month	0
E. Coli Bacteria	0	1	0

SUBSTANCE (UNITS)	MRDLG	MRDL	HIGHEST ANNUAL AVERAGE	RANGE
Chlorine (ppm)	4	4	1.6	0.0 - 3.6

SUBSTANCE (UNITS)	MCLG	MCL	HIGHEST Locational Running ANNUAL AVERAGE	Range
Haloacetic Acids (ppb)	N/A	60	43	5 - 73
Total Trihalomethanes (ppb)	N/A	80	67	18 - 94

SUBSTANCE (UNITS)	MCLG	MCL	ANNUAL AVERAGE	RANGE
Nitrate (ppm)	10	10	ND	ND - ND
Nitrite (ppm)	1	1	0.10	ND - 0.391

TABLE 2- Bolling Side

VIOLATION	TYPICAL SOURCE	COMMENTS
No	Coliforms are naturally present in the environment; as well as feces; fecal coliforms and *E. coli* only come from human and animal fecal waste.	No samples tested positive for Total Coliform (TC) and/or E. Coli (EC) Bacteria in 2022 on the Bolling Side, with the exception of 1 TC+/EC+ from Bldg. 1300 collected on June 7th, 2022. As well as, 1 TC+/EC- from Bldg. 8660 collected on December 6th, 2022. However, although E. Coli was detected; JBAB is not in violation of the E. Coli MCL per 40 CFR 141.153 (h)(7)(iv).
No		

VIOLATION	TYPICAL SOURCE	COMMENTS
No	Water additive that protects against microbial contamination. Chlorine is combined with ammonia to form chloramine.	Chlorine levels were not always within required standards for 2022, but heterotrophic plate counts (HPC) were performed for points with low chlorine residual.

VIOLATION	TYPICAL SOURCE	COMMENTS
No	Haloacetic acids are a byproduct of drinking water disinfection.	Disinfection byproducts remained within required standards for 2022.
No	Trihalomethanes are a byproduct of drinking water disinfection.	

VIOLATION	TYPICAL SOURCE	COMMENTS
No	Runoff from fertilizer use; erosion from natural deposits.	Nitrates and nitrites are inorganic chemicals composed of nitrogen and oxygen. Samples were in the required parameters for 2022.
No	Runoff from fertilizer use; erosion from natural deposits.	

TABLE DEFINITIONS

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements by the water supplier.

Heterotrophic Plate Count (HPC): A procedure for estimating the number of live heterotrophic bacteria in water. Whenever chlorine concentrations in potable water are undetectable or too low, HPC sampling is conducted to quantify the amount of heterotrophic bacteria present despite having low residual chlorine.

Maximum Contaminant Level Goal (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.

Maximum Contaminant Level (MCL): 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.

Maximum Residual Disinfectant Level Goal (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 disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (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. Compliance with the MRDL is based on the highest Quarterly Running Annual Average.

N/A: Not applicable.

ND: Not detected at testing limit.

Parts Per Billion (ppb): One part substance per billion parts of water (or micrograms per liter).

Parts Per Million (ppm): One part substance per million parts of water (or milligrams per liter).

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

90th Percentile Detection: Result from a set of lead and copper samples that is used to determine if the water system will be required to implement additional actions. Action is only required should the 90th Percentile sample be higher than the Action Level listed for either copper or lead.

VIOLATIONS

Explanation of Violation:

As stipulated in 40 CFR §141.74(c)(3)(i), the JBAB PWS is required to measure the residual disinfectant concentration in the distribution system at the same point and at the same time that total coliforms are sampled. Per 40 CFR §141.72(b)(3)(i), the residual disinfectant concentration in the distribution system cannot be undetectable in more than five percent of the samples each month, for any two consecutive months that the system serves water to the public. Water in the distribution system with a heterotrophic bacteria concentration less than or equal to 500/ml, measured as heterotrophic plate count (HPC) as specified in 40 CFR §141.74(a)(1), is deemed to have a detectable disinfectant residual for purposes of determining compliance with this requirement.

The JBAB PWS reported greater than five percent of October and November 2022 samples with an undetectable residual disinfectant concentration. Failure to meet the requirements of 40 CFR§141.72(b)(3)(i) is a treatment technique violation of the Surface Water Treatment Rule (SWTR) per 40 CFR §141.72.

Length of Violation: October 2022 - November 2022

Potential Adverse Health Affects: N/A

Actions Taken by JBAB to Address Violation: EPA was notified by the JBAB PWS on November 29, 2022 that its November 2022 samples showed greater than five percent with an undetectable residual disinfectant concentration. On Dec. 28, 2022, JBAB sampled disinfectant levels after the water lines inside of buildings 47 and 48 were flushed to maintain adequate disinfectant levels. Disinfectant residual levels were within the standard parameters and have met the requirements. Notification was then distributed to JBAB consumers.

NOTE: Please Refer to pages 17-18 for the Public Notification associated with this violation.

TIER 2 PUBLIC NOTIFCATION

IMPORTANT INFORMATION ABOUT OUR DRINKING WATER

Monitoring Requirements Not Met for Joint Base Anacostia-Bolling (JBAB)

JBAB routinely monitors for disinfectant residual in the distribution system. This measurement tells us if the water supply is being disinfected properly. Disinfectant residual is the amount of chlorine or related disinfectant present in the pipes of the distribution system. If the amount of disinfectant is too low; organisms could grow in the pipes which could affect the quality and safety of the water.

During the months of October and November 2022, disinfectant residual was undetectable in more than 5% of samples. The standard states disinfectant may be undetectable in no more than 5% of samples each month for two months in a row as required in 40 CFR §141.72(b)(3)(i).

What is being done?

On Dec. 28, 2022, we sampled disinfectant levels after the water lines inside of buildings 47 and 48 were flushed to maintain adequate disinfectant levels. Disinfectant residual levels were within the standard parameters and have met the requirements.

What should I do?

No actions necessary. You do not need to boil your water, find an alternate water supply, or take other corrective actions. However, if you have specific health concerns, consult your doctor. If you have a severely compromised immune system, undergone organ transplant surgery or chemotherapy, have cancer, HIV/AIDS, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What does this mean?

This is not an emergency. Emergencies require 24 hours notice. The bacteria detected by heterotrophic plate count (HPC) are not necessarily harmful. HPC is simply an alternative method of determining disinfectant residual levels. The number of such bacteria is an indicator of whether there is enough disinfectant in the distribution system. Although the sampling results and HPC count readings were not in parameters tests taken concurrently during this time period did not detect the presence of total coliform bacteria in the water indicating potable water.

However, if you experience any of these symptoms stated below and they persist, you may want to seek medical advice. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

This notice is being sent to you by the JBAB PWS Water System
PWS ID# DC0000004. Date distributed: 17 Jan 2023

TIER 2 PUBLIC NOTIFCATION

IMPORTANT INFORMATION ABOUT OUR DRINKING WATER

Monitoring Requirements Not Met for Joint Base Anacostia-Bolling (JBAB)

The table below lists details of the samples that were collected with an undetectable residual disinfectant concentration. Again, on Dec. 28, 2022, we sampled disinfectant levels after the water lines inside of buildings 47 and 48 were flushed to maintain adequate disinfectant levels, and disinfectant residual levels were within the standard parameters and have met the requirements.

Standard for Disinfectant Residual	Sampling Results	Heterotrophic Plate Count (HPC) Values Limit (0-500 cfu/mL)
Total Chlorine (0.1 –2) mg/l	**October 2022:** • [4 Oct 22] Bldg.48 – chlorine: < 0.10 mg/l • [18 Oct 22] Bldg.48 – chlorine: < 0.10 mg/l **November 2022:** • [15 Nov 22] Bldg. 47 – chlorine: < 0.10 mg/l • [15 Nov 22] Bldg. 48 – chlorine: < 0.10 mg/l	**October 2022:** • [4 Oct 22] Bldg.48 – HPC: 1400 cfu/mL • [18 Oct 22] Bldg.48 – HPC: 2800 cfu/mL **November 2022:** • [15 Nov 22] Bldg. 47 – HPC: 2200 cfu/mL • [15 Nov 22] Bldg. 48 – HPC: 1700 cfu/mL

For additional information concerning this notice, please contact MSgt Jon Andrew, 316 MDS Bioenvironmental Engineering at (202) 404-1992.

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

This notice is being sent to you by the JBAB PWS Water System
PWS ID# DC0000004. Date distributed: 17 Jan 2023

VIOLATIONS CONTINUED

Explanation of Violation: The JBAB PWS is required to monitor for total coliform and residual disinfectants monthly and analytical results must be reported to EPA within the first ten days following the end of the monitoring period as required by 40 CFR 141.31(a)(2). JBAB failed to report total coliform and residual disinfectant monitoring results for the June 2022 monitoring period by the July 10, 2022 deadline.

Length of Violation: June 2022.

Potential Adverse Health Affects: N/A

Actions Taken by JBAB to Address Violation: On 12 and 13 July 2022, results were submitted.

NOTE: Please Refer to pages 20-21 for the Public Notification associated with this violation.

IMPORTANT INFORMATION ABOUT OUR DRINKING WATER

Monitoring Requirements Not Met for Joint Base Anacostia-Bolling (JBAB)

The JBAB Public Water System (PWS) is required to collect a minimum of twenty (20) total coliform and residual disinfectant samples per month. Analytical results of the samples must be reported to the Environmental Protection Agency (EPA) within the first ten (10) days following the end of the monitoring period as required by 40 CFR 141.31(a)(2). JBAB failed to report monthly monitoring results to the EPA for the period ending June 30, 2022, which is intended to be sent no later than July 11, 2022 but instead was sent July 12, 2022 and July 13, 2022. Late data submission is a failure to meet requirements and is a reporting violation as outlined in 40 CFR 141.75(b)(2).

The table below lists details of the samples that were not reported on-time:

Contaminants of Concern	Required Sampling Frequency	Number of Samples Required	Required Timeframe for Collection of Samples
Total Coliform and Residual Disinfectant	Monthly	20	1 June 22 - 31 June 22

What was done?

On 12 July 2022, incomplete results for total coliform and residual disinfectant were submitted to EPA and the remaining missing results were sent 13 July, 2022 after EPA inquired.

What does this mean?

We are required to monitor our drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During June 2022 all regulatory monitoring water samples were collected and analyzed in the lab, however not reported to the EPA for review by the deadline outlined in the CFR. Additionally, all samples taken during June 2022 were within prescribed regulatory limits.

Issues with in/outbound personnel and program changeover caused JBAB to not meet the monthly reporting requirements. While delayed reporting does not constitute an emergency, it still requires public notification in the event those results were of exceedance and if any corrective actions needed to take place.

What should I do?

No actions are necessary, this is simply a notification to update consumers of JBAB PWS's compliance checks. This is not an emergency. Emergencies are distributed to the public within 24 hours. You do not need to boil your water, use an alternate water supply or take other corrective actions.

This notice is being sent to you by the JBAB PWS Water System
PWS ID# DC0000004. Date distributed: 1 July 2023

TIER 3 PUBLIC NOTIFICATION

IMPORTANT INFORMATION ABOUT OUR DRINKING WATER

Monitoring Requirements Not Met for Joint Base Anacostia-Bolling (JBAB)

For additional information concerning this notice, please contact 316 MDS Bioenvironmental Engineering at (202) 404 -1992.

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

This notice is being sent to you by the JBAB PWS Water System
PWS ID# DC0000004. Date distributed: 1 July 2023

WHAT CAN I DO TO IMPROVE WATER QUALITY?

As a user, 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.

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. JBAB is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

For more information about your drinking water, please contact Bioenvironmental Engineering, at (202)-404-1992.

Este reporte contiene información importante sobre el agua potable que usted consume. Para obtener una traducción del reporte, por favor comuníquese con la Oficina de Asuntos Públicos al (202) 404-8863. Si necesita la asistencia de un traductor con respecto a información sobre DC Water, favor de contactar DC Water Asistencia al Cliente al (202) 354-3600 (8am a 5pm, Lunes a Viernes).

Joint Base Anacostia-Bolling