

2025 Water Quality Report

Baltimore City Department of Public Works

BALTIMORE CITY
DEPARTMENT OF PUBLIC WORKS

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Message from the **Director**



Greetings,

It is my pleasure to present the Baltimore City Department of Public Works' (DPW) 2025 Water Quality Report. This report contains the latest water quality testing results and demonstrates our continued compliance with federal and state drinking water standards. Since being sworn in as Director in September 2025, I have seen firsthand the extraordinary dedication of the employees who work every day to provide high-quality, reliable drinking water to Baltimore residents. Their commitment to public service is the foundation of everything we do. We will introduce you to some of our talented team members in this report.

As utilities across the country face evolving regulations, aging infrastructure, environmental challenges, and growing service demands, DPW remains focused on building a resilient, modern water system that will serve Baltimore for generations to come. Through innovation, strategic investment, and operational excellence, we are strengthening our ability to meet the needs of today while preparing for the challenges of tomorrow. I hope this report gives you greater insight into the care, expertise, and commitment behind every drop of water we deliver.

Thank you for the opportunity to serve you.

Yours in service,

Matthew Garbark

Matthew Garbark
Director
Baltimore City Department of Public Works

"DPW remains focused on building a resilient, modern water system that will serve Baltimore for generations to come."

What Our Customers are Saying

Baltimore City Department of Public Works employees work to provide high-quality, reliable drinking water and responsive customer service to our communities. While much of this high quality work happens behind the scenes, residents occasionally take the time to share their appreciation when employees go above and beyond. These comments highlight the dedication, professionalism, and commitment of DPW staff who serve Baltimore residents and businesses every day.

"(I) would like to thank the crew. **They did an awesome job."**

Linhard
Baltimore County

"Howard County remains confident in the quality of water supplied by Baltimore and appreciates their ongoing efforts to provide safe, reliable drinking water that meets or exceeds regulatory standards."

Rodney B.
Howard County

"(I) wanted to say thank you for such prompt services."

Mosses
Baltimore City

"He (DPW Repair Worker) went above and beyond to assist with this ongoing issue.

He really showed compassion and I appreciate all of his help... I would like to see him acknowledged."

Jerchelle G.
Baltimore City

"To the Water Department, thank you for fixing the water leak that had been a long-standing issue along my commute. A heartfelt thank you for a job well done!

DPW Customer
Baltimore County

"The crew was knowledgeable, professional, and took the time to listen. They came out and did what they said they were going to do, and that meant a lot. They did an outstanding job representing DPW and the Mayor."

Timothy B.
Baltimore City

About the Report

This Annual Water Quality Report covers January 1 to December 31, 2025, for the Baltimore City DPW water system (PWSID#:MD0300002). It includes data on drinking water quality in the Baltimore region, educational information, important public health notices, and a contact directory at the end of the report. This document, also known as the Consumer Confidence Report (CCR), is being provided as required by the U.S. Environmental Protection Agency (EPA).

Look for the icon below throughout this report to help guide and clarify key information.



Read Helpful Fast Facts

Sharing this Report
Please share this 28th edition of the Annual Water Quality Report with your neighbors, friends, colleagues, and family members. To view this report online, scan the QR code below or visit DPW's website: publicworks.baltimoreCity.gov/waterreport. To request a printed copy of this report, please call us:

311: Baltimore City Residents
443-263-2220: Baltimore County Residents

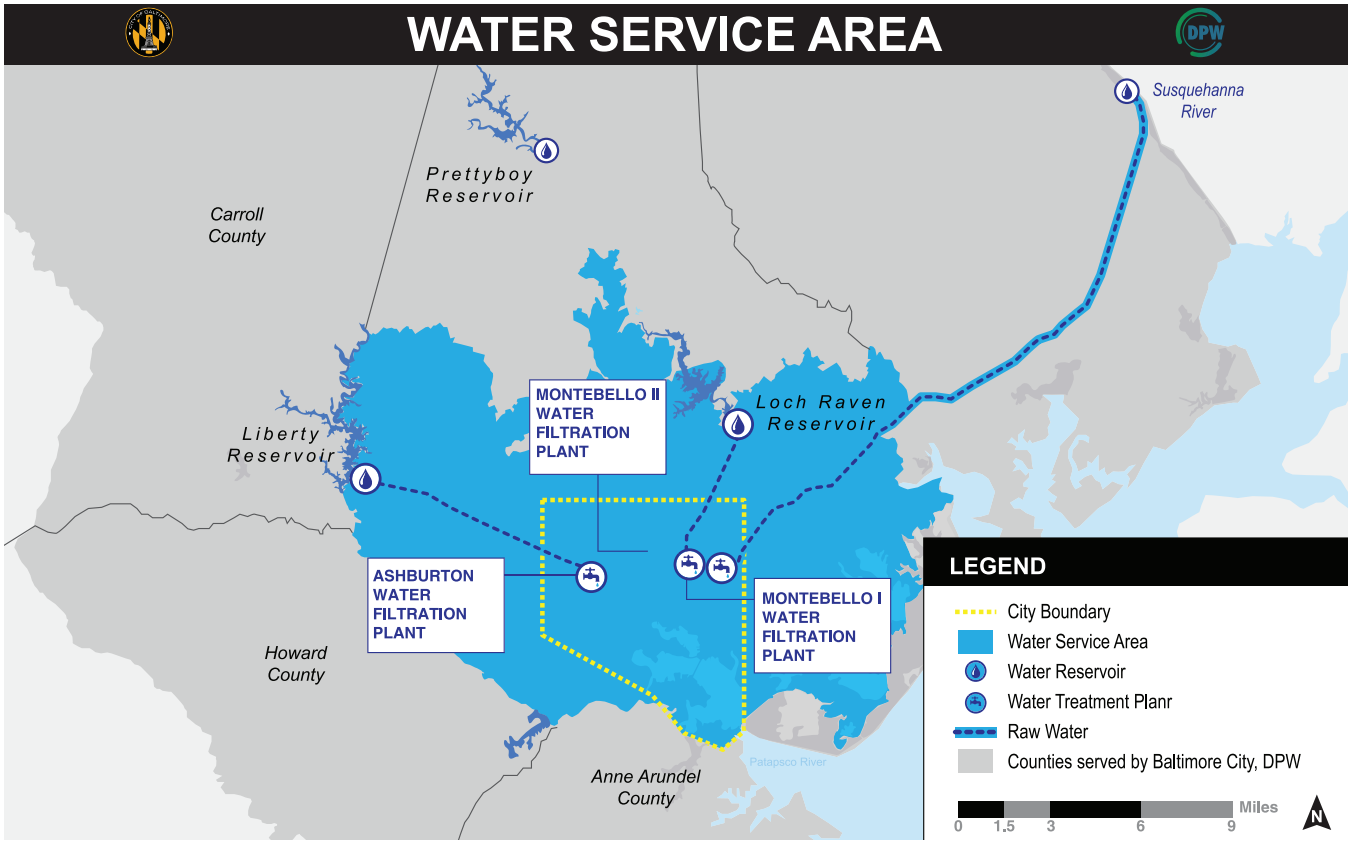
For questions or concerns about this report, please contact one of the City's Water Quality Laboratories:

- Montebello: 410-396-6040
- Ashburton: 410-396-0150

Where Does
Your Water Come From?

Baltimore's primary water source is surface water from rainfall and snowmelt. This water is collected and stored in the system's Liberty, Loch Raven, and Prettyboy reservoirs with a combined capacity of approximately 84 billion gallons. The Baltimore water supply is also linked to the Susquehanna River, which flows from Cooperstown, N.Y., to Havre de Grace, MD. Water from the Susquehanna River is used only during severe drought conditions.

The area's reservoirs are surrounded primarily by native woodlands, which filter out pollutants and prevent soil erosion and runoff. These watershed lands were established solely to protect our drinking water supply. Although the reservoirs are the City's property, all surrounding jurisdictions have a stake in their well-being.



Liberty Reservoir has a capacity of 40 billion gallons; Prettyboy Reservoir has a capacity of 20 billion gallons; and Loch Raven Reservoir has a capacity of 24 billion gallons. Together, that's enough water to fill more than 80 Baltimore Ravens football stadiums!

James Patrick

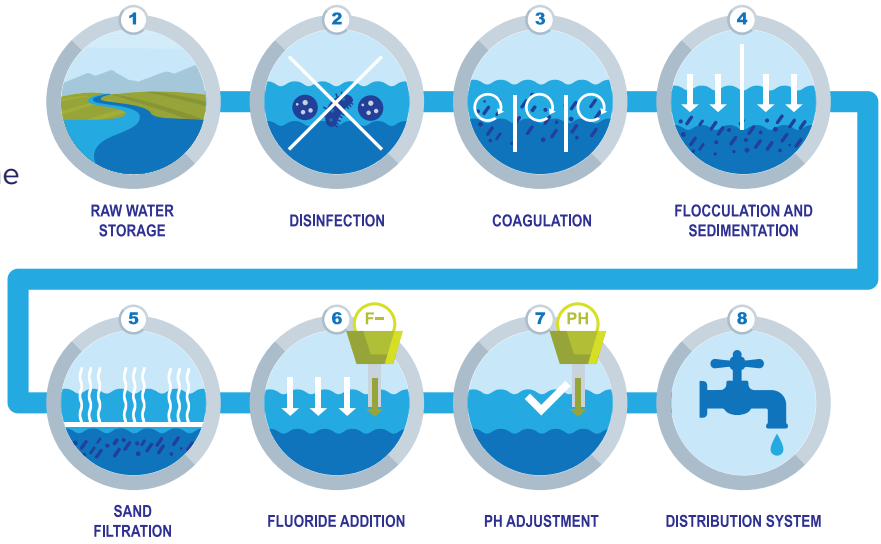
Operations Manager

James Patrick tackles water-related issues across all major DPW systems – water, sewer, and storm. His job is especially critical when it comes to water, as he faces new emergencies every day.

From navigating the aftermath of winter storms – such as removing large ice formations to access broken water mains – to coordinating with 311 dispatchers on a range of water-related issues, each day brings new challenges. Patrick values the complexity of the work and says it is rewarding to be part of a team committed to keeping water flowing.



Water Treatment Process



STEP 1: Source Water Storage –
DPW stores untreated source water at one of three City-owned reservoirs:

- **Loch Raven Reservoir**
- **Prettyboy Reservoir**
- **Liberty Reservoir**

STEP 2: Disinfection –
Treatment plant staff disinfect untreated water by adding sodium hypochlorite or chlorine.

STEP 3: Coagulation –
Treatment plant staff add aluminum sulfate, commonly known as alum, to the water, forming tiny, sticky particles called floc, that attract and trap suspended particles.

STEP 4: Flocculation and Sedimentation –
Water is gently mixed to promote the formation of larger floc clumps. The water then flows into a sedimentation basin, where gravity helps the heavier floc settle to the bottom, forming a sludge layer.

STEP 5: Sand Filtration –
The clarified water flows through layers of sand and gravel, removing fine particles and microorganisms that may have escaped earlier treatment stages.

STEP 6: Fluoride Addition –
Fluoride is added to drinking water as fluorosilicic acid, sodium fluoride, or sodium fluorosilicate to help prevent tooth decay and promote dental health.

STEP 7: pH Adjustment –
When aluminum sulfate is added to the water, the water's acidity (corrosiveness) increases. This treatment process ensures that the water maintains a suitable pH for consumption and helps prevent corrosion in the distribution system. The ideal pH range for drinking water is 6.5 to 8.5.

STEP 8: Distribution System –
After treatment, the water is pumped into the distribution system, which consists of pipes, pumps, and storage tanks that deliver water to homes, businesses, and other consumers.

Addison Frett

Supervisor of Water Systems Treatment at Montebello Filtration Plants

For more than 37 years, Addison Frett has helped deliver high-quality drinking water to residents of the Baltimore area.

As the Water Systems Treatment Supervisor for Montebello Filtration Plants I and II, Frett oversees key aspects of the water treatment process, including monitoring compliance with water quality standards, managing chemical supplies, and ensuring staff have the equipment needed to perform their jobs safely.



“The one thing nobody can live without is water. To know that I have a big part in making sure it’s safe for human consumption means a lot to me.”



Alum (Aluminum Sulfate) tanks at the Montebello Filtration Plant

From Treatment Plant to Tap:

How Your Water Gets to You

After treatment, water is stored in covered tanks until it is ready for distribution. It is then delivered to homes and businesses through a pressurized underground pipe network spanning more than 4,500 miles, roughly 1.17 times the length of the Great Wall of China (3,889 miles).

The system is divided into five major pressure zones to maintain reliable water pressure and supply for 1.8 million customers across the Baltimore area.

A water molecule is comprised of two parts Hydrogen with one part Oxygen: H+H+O = H_2O (Water).

Ana Ampuero

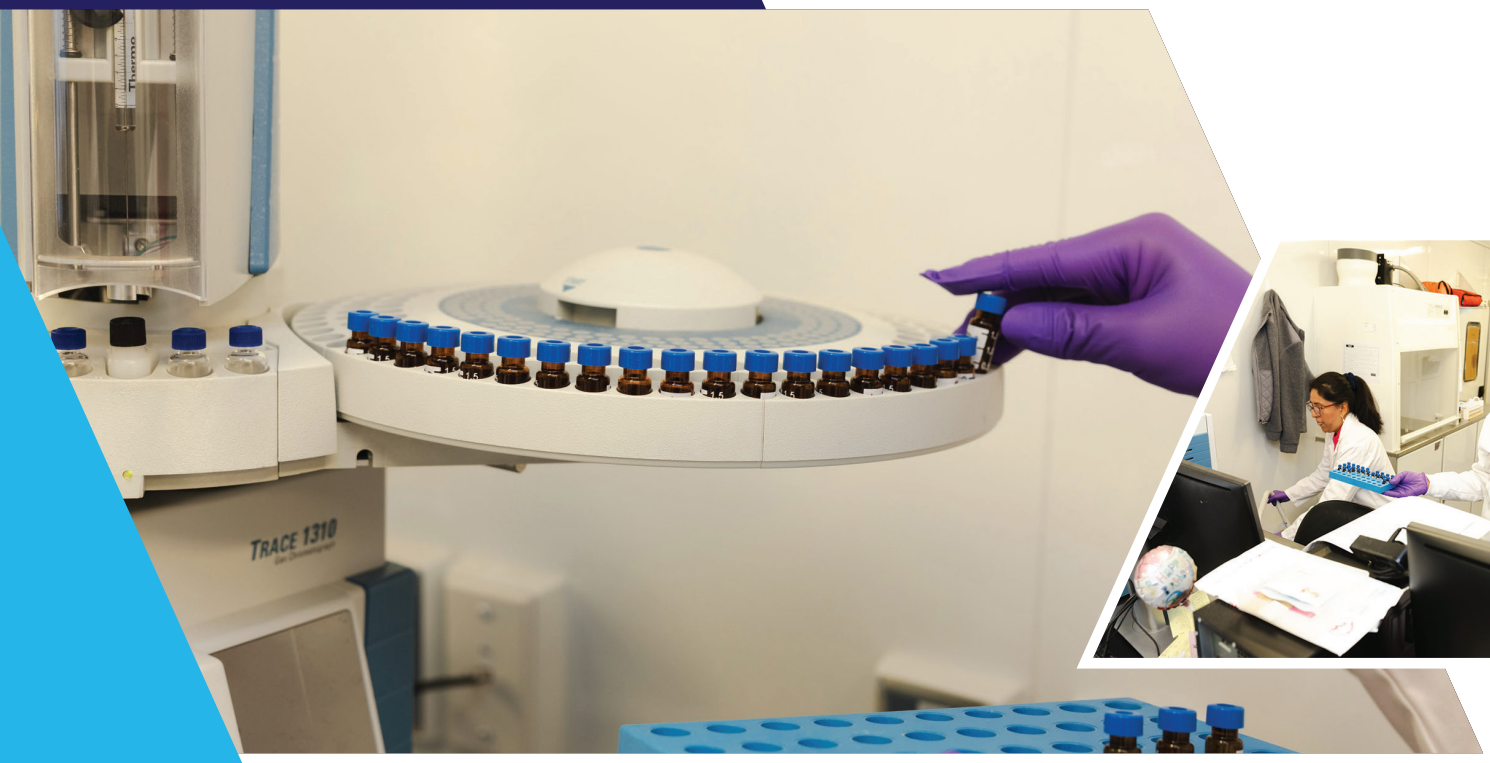
Chemist

As a chemist at the Montebello Water Filtration Plant, Ana Ampuero takes immense pride in ensuring Baltimore's water is the best it can be for the community.

Ampuero regularly analyzes organic compounds, and ensures the lab adheres to all MDE regulations and parameters.



"Some people have disease(s), such as kidney problems and cancer, and we want to make sure we provide them (with) good quality water."



Senior chemist Ana Ampuero (left) and Samir Georges (right) conduct routine water quality testing.

Why We Test Your Water

Testing is one of the most important ways we protect your drinking water. Every day of the year, DPW collects and analyzes water samples from reservoirs, treatment plants, storage facilities, and throughout the distribution system to ensure your water meets or exceeds all federal and state standards.

Our scientists, chemists, engineers, and plant operators monitor for bacteria, disinfectant levels, and other water quality indicators. Under federal regulations, DPW must collect at least 360 samples each month across the distribution system – and we routinely collect more. If testing identifies a potential concern, additional sampling is conducted immediately, and the results are reported to the Maryland Department of the Environment (MDE).

IMPORTANT HEALTH INFORMATION

People with weakened immune systems – including those undergoing chemotherapy, organ transplant recipients, individuals with HIV/AIDS, some seniors, and infants – may be more vulnerable to contaminants in drinking water. These individuals should consult their health care providers about drinking water safety.

DPW performs more than 100,000 water quality analyses each year.

Kris Carter

Water Facilities Division Pumping Manager

Having served in his post for the past two years, Kris Carter plays a critical role in maintaining the quality and safety of the water supply. He monitors chlorine residuals to ensure adequate disinfection throughout the water system.

Carter also manages the Water Quality Flushing Program, which helps maintain water quality throughout the distribution system. He believes it is important not to take water for granted.



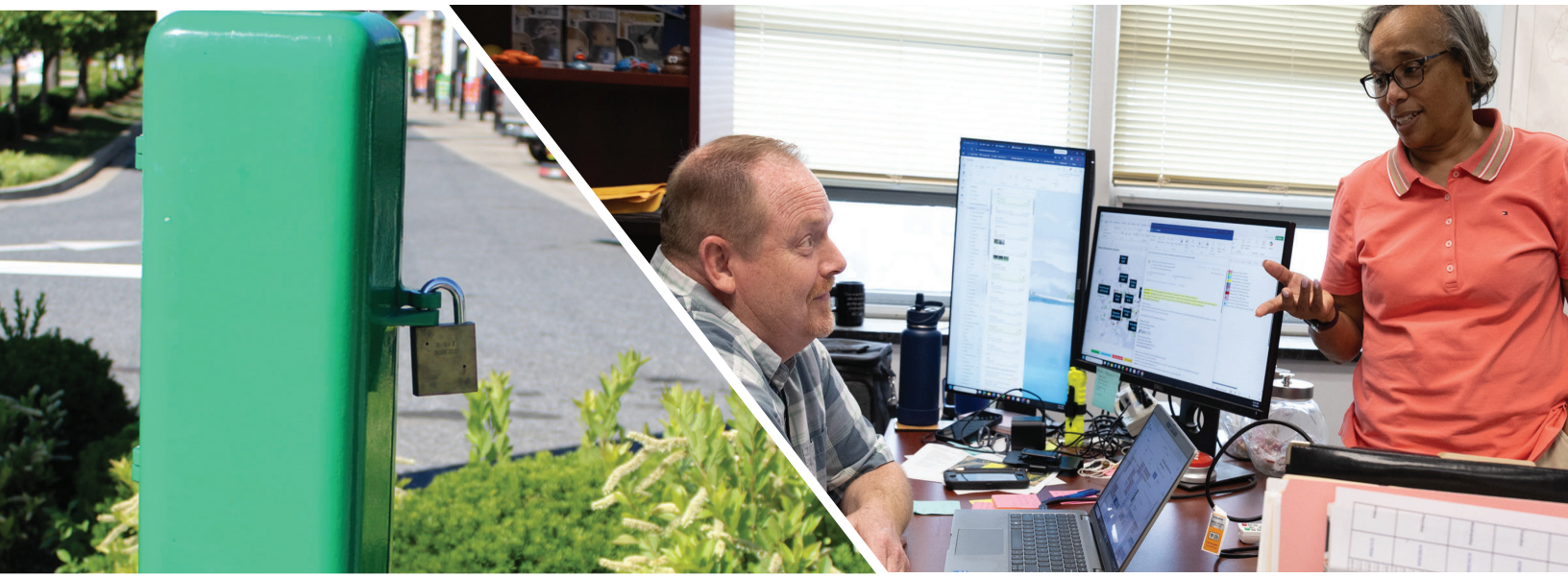
“Water is not just to drink; it’s to bathe and play in.”

Monitoring Water Beyond the Treatment Plant

DPW continues to monitor water quality after it leaves the treatment plant to ensure safe, reliable drinking water throughout the distribution system. Historically, DPW collected water samples at various sites, such as gas stations. However, these sites were sometimes inaccessible to DPW workers. To address this issue, DPW has installed six new dedicated sampling stations at key locations across the region, providing DPW crews with direct access to the water distribution system.

The stations connect directly to water mains, enabling staff to collect consistent, representative samples as water flows through the system to homes and businesses.

Kris Carter (left) and Deneen Gordon (right) discuss the importance of sampling stations as a tool for testing water; Carter's office at the Ashburton Filtration Plant.



One of six water sampling stations in the Baltimore region provides DPW crews with direct access to the water supply.

"These stations give us a better picture of what's happening throughout the system,"

said Deneen Gordon, Division Chief of DPW's Laboratory Operations Division. "By sampling directly from the water main, we can obtain more representative samples of the water our customers receive." The stations support routine testing of bacteria, disinfectant levels, and other key water quality indicators.

Jammie Booker

Utility Install Repair Supervisor

Proudly serving in his post for the past 26 years, Jammie Booker sees himself as a loyal servant leader to Baltimore – not an employee. After water is cleaned and purified at the Montebello Filtration Plant, he ensures it remains that way all the way to customers' taps.

Whenever water main breaks occur in the city, Booker and his team are there to address them. Employees like Booker are a major reason why Baltimore City's response time for water main breaks has decreased from 24 hours to 16 hours.



Investing in a Reliable Water System





From wooden pipes to modern water mains, Baltimore's earliest water system relied on hollowed-out logs to move water throughout the City. This preserved pipe (above) highlights the remarkable evolution of the infrastructure that now serves 1.8 million customers across the region(left).

Baltimore's water distribution system includes more than 3,800 miles of water mains. During the winter of 2025, extreme cold temperatures contributed to a record number of water main breaks. DPW crews, contractors, and dispatch staff worked around the clock to restore service and keep water flowing to homes and businesses. To maintain reliability, DPW continues to replace and rehabilitate aging water mains through its Water Main Replacement Program.

BY THE NUMBERS

3,800+ miles of water mains
1.8 million customers served
11.47 miles of water main improved or replaced as of May 2026
Goal: Modernize 15 miles of water main annually through 2030



Jonathan Lewis

Water Facilities Division Engineer

Despite being relatively new to the role, Jonathan Lewis plays a critical part in maintaining the quality of Baltimore's water system. One of his primary responsibilities is overseeing and providing final approval for construction projects at pumping stations across the region.

He also recently participated in testing a new water mixing panel – equipment designed to reduce sediment buildup in water mains.



What Happens When a Water Main Breaks?

Water main breaks are caused by various factors, especially freezing and thawing which shift the ground and put stress on pipes. A history of breaks, pipe corrosion, soil conditions, and age also contribute to water main breaks. Once service is restored, customers who have lost water should run water through a sink or tub faucet until it is clear.

If you notice a water main break or leak in your community, report it promptly:

- **Baltimore City:** Call 311 or visit balt311.baltimorecity.gov
- **Baltimore County:** 443-263-2220 or 410-396-5352
- **Howard County:** 410-313-2200 or howardcountymd.gov/tell-hoco
- **Carroll County:** 410-386-2164 (day) or 410-848-4343 (after hours)
- **Harford County:** 410-612-1612 or harfordcountymd.gov/1737/You-Click-We-Fix

Crews recently repaired a water main on Wilkens Avenue in Baltimore.



Ryan Johnson

Superintendent, UMD Utilities Maintenance and Repair

Ryan Johnson conducts regular water pressure checks, including inspections of fire hydrants. His division also turns water mains on and off for properties experiencing a water leak or when DPW needs to make a water main repair.

Johnson works behind the scenes to help ensure customers have reliable access to safe drinking water.



“We are first responders because water is essential.”

Protecting Our Watersheds:

Liberty Reservoir Forest Restoration

A tornado in June 2024 caused significant damage to forested areas surrounding Liberty Reservoir, uprooting trees and exposing soil that can increase erosion and affect water quality. Forests surrounding reservoirs play a critical role in protecting drinking water by filtering runoff and stabilizing soils. Restoring these areas helps safeguard long-term water quality for Baltimore's drinking water supply.

To address the damage, DPW secured $614,000 in funding through the Healthy Forests, Healthy Waters Initiative to support restoration efforts in partnership with the Maryland Forest Service and the Alliance for the Chesapeake Bay. The project will re-establish a native mixed-hardwood forest in the affected area, helping reduce sediment runoff, improve habitat, and strengthen watershed resilience in the future.



Tornado-damaged Liberty Reservoir Forest



Anticipated post-restoration conditions

Maria Reed

Laboratory Technical Supervisor

Maria Reed works at the Montebello Filtration Plant with a dedicated team of scientists who conduct chemical and microbiological analyses of untreated water and other byproducts of the water treatment process. It is important for her to ensure the lab complies with both EPA rules and regulations and the laboratory-approved quality management system.

Reed oversees a wide range of laboratory operations, including staff training and scheduling, vehicle maintenance, and ensuring compliance with federal Safe Drinking Water Act requirements.



Testing for Water Quality



Maria Reed conducts testing at the Montebello Filtration Plant laboratory.

To ensure tap water is safe to drink, the EPA sets regulations that limit the number of contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations set limits for contaminants in bottled water. The presence of contaminants does not necessarily mean that water poses a health risk.

More information about contaminants and potential health effects is available by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Microbiological Contaminants: Viruses and bacteria that may originate from sewage treatment plants, septic systems, agricultural and livestock operations, and wildlife.

Fluoride: A mineral added to water to prevent tooth decay.

Turbidity: A measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (such as whether disease-causing organisms are present).

Inorganic Contaminants: Include salts and metals that may occur naturally or result from human activities, such as urban stormwater runoff, industrial and domestic wastewater discharges, oil and gas production, mining, and agricultural practices.

Arsenic: A gray, semi-metallic element that occurs naturally or in certain types of rock and soil. Arsenic can also enter the environment through agricultural and industrial processes.

Radioactive Contaminants: These substances may occur naturally in the environment or result from activities such as oil and gas production or mining operations.

Lead and Copper: Enter drinking water primarily through plumbing materials. Exposure to lead and copper may cause health problems, ranging from stomach distress to brain damage.

Chlorine: Added to water to control the growth of bacteria and viruses.

Volatile Organic Chemicals: Byproducts of industrial processes and petroleum production. They originate from gas stations, urban stormwater runoff, and septic systems.



A gas chromatograph, which detects low-level organic contaminants in water samples, at the Montebello Filtration Plant.

How to Read the Water Quality Table

The EPA establishes safe drinking water regulations that limit the number of contaminants in tap water. The table on the following pages shows the concentration of detected substances in comparison to regulatory limits. Substances not detected are not included in the data table.

Key Water Quality Terms

The following are definitions of key terms referring to standards and goals of water quality noted in the data table.

MCL: Maximum Contaminant Level. The highest level of a contaminant allowed by health regulations established by the EPA.

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 include a margin of safety.

MRL: Minimum Reporting Level. The lowest concentration of a substance that a laboratory can reliably measure. Results below the MRL are typically reported as “not detected” or “less than.”

AL: Action Level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a system must follow.

PPM: Parts per million; (or 1 drop in 1 million gallons of water).

PPB: Parts per billion; (or 1 drop in 1 billion gallons of water).

PPT: Parts per trillion; (or 1 drop in 1 trillion gallons of water).

HLD: Highest Level Detected of a substance.

NTU: Nephelometric Turbidity Units. A unit of measurement used to report the level of turbidity or “cloudiness” in water.

ND: Non-Detection. The concentration of a substance could not be detected at or above the minimum detection limit of that substance.

pCi/L: Picocuries per Liter. A measure of the level of radioactivity in the water.

Total COLIFORMS/E. COLI: Indicator bacteria. This type of bacteriological test is routinely used to determine if contamination has occurred in a drinking water system.

LRAA: Locational Running Annual Average. Calculated by averaging the results of all samples collected at a single site within a quarter and then averaging this quarterly average for the last four quarters at the same site.

HAAs: Haloacetic Acids. A group of chemicals known as disinfection byproducts. These form when a disinfectant reacts with naturally occurring organic and inorganic matter in water.

HAL: Health Advisory Level. The EPA establishes a non-regulatory human health-based level of protection from drinking water contaminants that are not regulated under the Safe Drinking Water Act.

TTHMs: Total Trihalomethanes. A group of chemicals that can form when organic matter in water is treated with halogen disinfectants such as chlorine.

The most common of these chemicals is trichloromethane (also called chloroform), but others, such as dibromochloromethane, bromodichloromethane, or bromoform, can also be found.

The sum of these four chemicals is referred to as total trihalomethanes (TTHMs).

2025 Consumer Confidence Report (CCR)
Detected Regulated Contaminants Table

City of Baltimore Annual Water Quality Report
Baltimore City Department of Public Works
Reporting Period: January 1, 2025 – December 31, 2025

The Baltimore City Department of Public Works (DPW) provides drinking water to 1.8 million customers throughout the region. DPW's 2025 Water Quality Report provides information on the quality of your drinking water. The report's data reflect the most recent testing in compliance with U.S. Environmental Protection Agency (EPA) requirements. A summary of the 2025 testing results is listed below.

LEAD AND COPPER – Tested at customers' taps. Testing is done every 3 years. 2024 was a compliance year for testing. Next round of compliance testing will take place in 2027.

Contaminant	EPA's Action Level	Ideal Goal (EPA's MCLG)	90% of Test Levels Were Less Than	# of Test with Levels Above EPA's Action Level	Range of Tap Sampling	Violation	Typical Sources
Lead	15 ppb	0 ppb	2.74 ppb	0	<2 - 7.09 ppb	No	Corrosion of household plumbing
Copper	1,300 ppb	1,300 ppb	112 ppb	0	14.4 - 402.0 ppb	No	Corrosion of household plumbing

INORGANIC CHEMICALS

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Ashburton Plant		Montebello Plants		Violation	Typical Sources
			Highest Result	Range of Test Results	Highest Result	Range of Test Results		
Arsenic	10 ppb	0 ppb	ND	<3 ppb	ND	<3 ppb	No	Erosion of natural deposits
Antimony	6 ppb	6 ppb	ND	<2 ppb	ND	<2 ppb	No	Erosion of natural deposits
Barium	2 ppm	2 ppm	0.0238	0.0199 – 0.0238	0.0407	0.0231 – 0.0407	No	Discharges from drilling wastes
Chlorine	4 ppm	4 ppm	1.14	0.40 – 1.14	1.20	0.40 – 1.20	No	Water additive to disinfect supply
Fluoride	4 ppm	4 ppm	0.90	0.50 – 0.90	1.09	0.07 – 1.09	No	Water additive that promotes strong teeth
Nitrate	10 ppm	10 ppm	5.81	0.91 – 5.81	1.57	0.41 – 1.57	No	Runoff from fertilizer use

PFAS CONTAMINANTS – MCLs listed are scheduled to go into effect April 26, 2029.

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Ashburton Plant	Montebello Plants	Violation	Typical Sources
			Highest Level Detected	Highest Level Detected		
PFOA	4 ppt	0 ppt	2.9 ppt	1.9 ppt	No	Man-made chemicals in a range of products
PFOS	4 ppt	0 ppt	3.3 ppt	1.7 ppt	No	Man-made chemicals in a range of products
PFBS	Used to calculate Hazard Index	Used to calculate Hazard Index	1.8 ppt	2.2 ppt	No	Man-made chemicals in a range of products
PFHxS	Used to calculate Hazard Index	10 ppt	ND	ND	No	Man-made chemicals in a range of products
PFNA	Used to calculate Hazard Index	10 ppt	ND	ND	No	Man-made chemicals in a range of products
HFPO-DA	Used to calculate Hazard Index	10 ppt	ND	ND	No	Man-made chemicals in a range of products
PFBS + PFHxS +PFNA +HFPO-DA	1.0 Hazard Index	1.0 Hazard Index	0.0009 HI	0.003 HI	No	Man-made chemicals in a range of products

UNREGULATED CONTAMINANTS

Contaminant	Minimum Reporting Level (MRL)	Ashburton Plant	Montebello Plants	Violation	Typical Sources
PFHxA	**3 ppt**	**2.90 ppt**	**2.08 ppt**	**No**	Man-made chemicals in a range of products

RADIOACTIVE CONTAMINANTS

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Level Detected	Range of Levels Detected	Violation	Major Sources
*** Combined Radium 226/228**	**5pCi/L**	**0**	**1.6**	**0.2 - 1.6**	**No**	**Erosion of natural deposits**

VOLATILE ORGANIC CHEMICALS

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	City of Baltimore Distribution System		Violation	Major Sources
			Highest Result (Locational Running Annual Average)	Range		
Total THMs	80 ppb	NA	77	23 - 133	No	By-product of drinking water chlorination
HAA (5)	60 ppb	NA	46	6 – 53	No	By-product of drinking water chlorination

TURBIDITY

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Ashburton Plant		Montebello Plants		Violation	Major Sources
Turbidity	Treatment Technique (TT)	None	Highest Result	Lowest %	Highest Result	Lowest %		Soil Run-off
	Filtration	NA	0.12 NTU	100%	0.22 NTU	100%	No	Soil Run-off

BACTERIA IN TAP WATER

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Monthly Percentage of Samples with Total Coliform Present	Violation	Typical Sources
Total Coliform (for systems that collect ≥ 40 samples/month	5% of monthly samples are positive	0	1.31%	No	Naturally present in the environment
CHLORINE	4 ppm	4 ppm	Running Annual Average of Samples Computed Quarterly 0.52 ppm (Based on 4,716 distribution system samples collected in 2025)	No	Water additive to disinfect supply

How to Read the Water Quality Data Table
EPA establishes the safe drinking water regulation that limits the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. Substances not detected are not included in the table.

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 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.

Minimum Reporting Level (MRL): The lowest concentration of a substance that a laboratory can reliably measure. Results below the MRL are typically reported as "not detected" or "less than."

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.

Non-Detection (ND): The concentration of a substance could not be detected at or above the minimum detection limit of that substance.

Units in the Table: PPM is "Parts per Million" (or 1 drop in 1 million gallons); PPB is "Parts per Billion" (or 1 drop in 1 billion gallons); PPT is "Parts per Trillion" (or 1 drop in 1 trillion gallons); NTU is "Nephelometric Turbidity Units," which is a unit of measure used to report the level of turbidity or "cloudiness" in the water.

Violations for Stage 2 THMs and HAAs are based on a locational annual average. Therefore, unless this exceeds the MCL, there is no violation.

***Radioactive contaminants are monitored on a 9-year schedule. Gross Alpha radioactive contaminant is monitored on a 6-year schedule for Montebello. 2019 was a compliance year for testing radioactive contaminants. The state allows monitoring of some contaminants less than once per year due to infrequent contaminant concentration level changes. Radioactive contaminants data, though representative, is more than one year old.**

Total Organic Carbon: The percentage of Total Organic Carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Deficiencies: Unresolved significant deficiencies that were identified during a survey done on the water system are shown below.

Date Identified	Facility	Code	Activity	Due Date	Description
10/4/2016	WATER SYSTEM	TR01		5/5/2026	CRITICAL TREATMENT IS IN POOR CONDITION OR BYPASSED (SIGNIFICANT)
7/22/2020	WATER SYSTEM	DS01		5/5/2026	DISTRIBUTION SYSTEM (SIGNIFICANT)

The system-wide Sanitary Survey was completed in 2017 with follow-up visits in 2018, 2020, and 2024. The follow-ups were to monitor and address concerns of accumulated sedimentation with 46 of the 60 filters located at the Montebello Treatment Plants (Montebello Plants 1&2 combined). The City plan is to rehabilitate all 60 filters, which include: repair of underdrains (if required), replacement of filter media, and rehabilitation of the surface sweep system. In 2020, 6 of the filters had been rehabilitated with the remaining filters scheduled for rehabilitation. In 2024, 21 filters had been rehabilitated. In 2026, 26 of the 28 filters at Montebello Plant #2 have been rehabilitated, with 2 filters in need of structural repair, which is being addressed under a separate contract. Montebello Plant #1: 8 filters have been rehabilitated to date, with a scheduled completion date of February 2028 for all filters at Montebello Plant #1.

Ronald Ashton, Jr.

Heavy Equipment Operator

Ronald Ashton, Jr. supports field operations by excavating work sites to depths of three to eight feet, identifying issues, assessing conditions, and preparing areas for safe and efficient water main repairs.

Each day begins with evaluating a site for hazards, securing equipment, and setting up the work zone before excavation. Ashton also serves as a mentor to machine operators who are learning on the job.



“The team shadows my everyday movement and strategy. We do it as safely, professionally, and efficiently as possible.”

Health Effects

Barium: Some people who drink water containing barium in excess of MCL over many years could experience an increase in their blood pressure.

CRYPTOSPORIDIUM RESULTS RANGE

Liberty: 0.00 – 0.09 Oocyst/Liter

Loch Raven: 0.00 – 0.19 Oocyst/Liter

Susquehanna River: 0.00 – 0.64 Oocyst/Liter

Nitrate

Nitrate in drinking water at levels above 10 ppm poses a health risk to infants under 6 months old. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods due to rainfall or agricultural activity. If you care for an infant, you should ask for advice from your health care provider.

SECONDARY CONTAMINANTS

Sodium levels in the water supply are often of concern to consumers who contact our facilities. **Sodium naturally occurs in untreated water, but its concentration can be increased by runoff from road surfaces treated with rock salt during snow and ice removal.** During 2025, the average sodium concentration measured in the finished water from the Ashburton and Montebello Water Filtration Plants was 19.7 ppm and 20.9 ppm, respectively.

PFAS MONITORING

PFAS - short for per- and polyfluoroalkyl substances - refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water- resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging, and firefighting foams. These uses of PFAS have led to their release into the environment, where several states have measured them in soil, surface water, groundwater, and seafood. Some PFAS can persist in the environment and the human body, accumulating in the food chain.

The EPA announced regulations for 6 PFAS compounds in drinking water in April 2024. The MCLs for PFOA and PFOS are 4.0 parts per trillion (ppt). The MCLs for HFPO-DA (GenX), PFNA, and PFHxS are 10 ppt. PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS use a Hazard Index of 1.0 (unitless) to determine if the combined and co-occurring levels of these PFAS pose a risk and require action.

Public water systems have three years (by 2029) to implement solutions that reduce these PFAS if monitoring shows that drinking water levels exceed these MCLs.

The MDE conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022.

The results are available on MDE's website at: https://marylanddepartmentoftheenvironment.shinyapps.io/MDE_PFAS_PublicWaterSystemStudyMap/

The Environmental Protection Agency (EPA) has ***proposed*** a rule for rescinding the regulations for the Hazard Index compounds. The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people. Three randomly selected systems in Maryland with populations less than 3300 people will also be tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

Data collected under UCMR5 improves understanding of the prevalence and amount of each constituent in the nation's drinking water systems.
The City of Baltimore began testing for the UCMR5 in August 2024 and concluded testing in May 2025. No constituents under UCMR5 were detected.

Lead

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water primarily comes from materials and components associated with service lines and home plumbing. The City is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk.

Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry, or doing a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water.

If you are concerned about lead in your water and wish to have your water tested, contact the City and Ashburton Laboratory at (410) 396-0150. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

Baltimore's Service Line Inventory is located on the home page of the program website: Baltimore Service Line Partnership or www.servicelinepartnership.baltimorecity.gov

Public Notice Violations

Reporting Requirement(s) Not Met for City of Baltimore

The City of Baltimore received a notice of Reporting Violation for the Certification of Customer Notification of Service Lines Classified as: Lead, Galvanized Requiring Replacement, **or Lead Status Unknown**.

Water systems are required to submit certification that the annual notification to customers served by a service line classified as Lead, Galvanized Requiring Replacement (GRR) or Lead Status Unknown to the Maryland Department of the Environment (MDE). The initial notification of service line materials must be submitted to MDE by October 16, 2024 and provided to water customers by November 15, 2024.

An initial inventory of service line pipe materials located within our service area was required to

be submitted to the MDE by October 16, 2024. Our initial inventory was submitted to MDE on November 25, 2024. The report was late because approximately 73,000 notifications of unknown pipe material were not included in the City's original notification mailings, which were sent on November 12, 2024. The notifications were mailed on November 25, 2024. It is suspected that, due to a data management error, 73,000 records were mistakenly omitted from the original list of properties with unknown pipe material.

Health Effects

Lead exposure can cause serious health problems; there is no safe level of lead in drinking water. Low levels of exposure in children have been linked to nervous system damage, learning disabilities, and impaired hearing.

In adults, low levels of exposure have been linked to premature birth in pregnant women, decreased kidney function, increased blood pressure, and hypertension. Contact your health care provider if you think you are at risk.

Although public health was not affected, as our customers, you have the right to know what happened and what we did to correct the situation.

What Should I Do?

There is nothing you need to do. You do not need to take any corrective actions.

What Is Being Done?

The City has revised the Quality Assurance review process for data management to prevent any recurrence.

The inventory is available online or upon request.



Richard Janne

Electrical Maintenance Supervisor

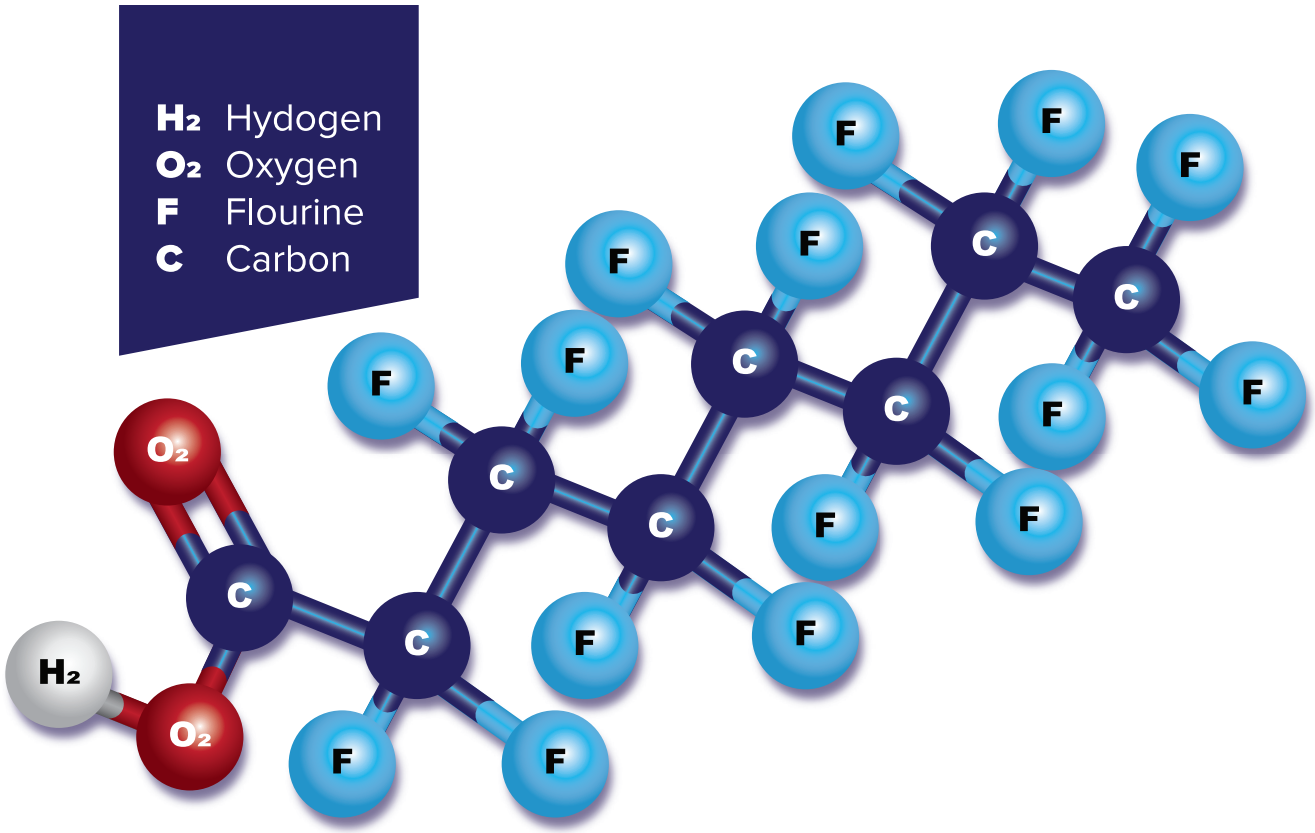
For a little over a year in DPW's Bureau of Water and Wastewater, Richard Janne has overseen preventive maintenance schedules, ensured work orders are completed correctly, and responded to overnight issues.

He also spends time in the field troubleshooting and monitoring ongoing work.

Janne describes the work as a balance of planning and hands-on problem solving. He emphasizes how closely electricity and water systems are connected, noting that without pumps and motors, water cannot reach its destination.



Monitoring PFAS



DPW implements protective measures to detect organic and human-made contaminants in your drinking water, including what are called Per- and Poly-Fluoroalkyl Substances (PFAS).

What are PFAS?

PFAS refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in many everyday products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. Over time, these chemicals have entered the environment, where they have been measured in soil, surface water, groundwater, and seafood across the United States. Some PFAS can remain in the environment and the human body for long periods and can accumulate in the food chain.

The EPA announced regulations for six PFAS compounds in drinking water in April 2024.

The Maximum Contaminant Levels (MCLs) for Perfluorooctanoic Acid (PFOA) and Perfluorooctanoic Sulfonic Acid (PFOS) are each 4.0 parts per trillion (ppt). The MCLs for HFPO-DA (GenX), PFNA, & PFHxS are 10 ppt.

PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS use a Hazard Index of 1.0 (unitless) to determine if the combined and co-occurring levels of these PFAS pose a risk and require action. Public water systems have three years (by 2029) to implement solutions that reduce these PFAS if monitoring shows that drinking water levels exceed these MCLs.

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) is an EPA program that requires nationwide monitoring of unregulated drinking water contaminants to assess their occurrence and inform potential future regulations. Data collected under UCMR5 improves understanding of the prevalence and amount of each constituent in the nation's drinking water systems.

The UCMR5 began testing for 29 PFAS compounds and lithium in 2023. The City of Baltimore began testing for (UCMR5) in August 2024 and concluded testing in May 2025. No constituents under UCMR5 were detected.

The UCMR5 must test all community water systems with populations of at least 3,300 people. Three randomly selected systems in Maryland with populations less than 3,300 people were also tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

Additional information about PFAS can be found on the MDE website:
mde.maryland.gov/publichealth/pages/pfas-landing-page.aspx

The MDE conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website:
https://marylanddepartmentoftheenvironment.shinyapps.io/MDE_PFAS_PublicWaterSystemStudyMap/



Help Us Protect Your Water Quality

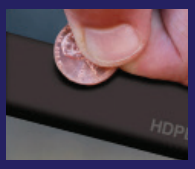
Our teams are committed to delivering clean, safe drinking water to Baltimore area residents through extensive testing and proactive measures. While water leaving the treatment plant meets all EPA guidelines and safety standards, the quality can change as it travels through your service line (drinking water supply), which connects your home to the public water main. Residents can take a few simple steps to reduce their potential exposure to contaminants such as lead and Legionella bacteria.

LEAD IN DRINKING WATER

Help Us Identify Your Drinking Water Service Line

Residents, businesses, and property owners are encouraged to complete a self-reporting survey to help identify service lines that may contain lead. This effort is part of the Baltimore Service Line Partnership, in collaboration with the Baltimore County Department of Public Works and Transportation (DPWT). The self-reporting survey is available through a one-stop portal that serves as a resource for the service line inventory process. By following the scratch, magnet, and tap test below, you can independently verify whether your water supply pipe is made of lead.

IDENTIFYING SERVICE LINE MATERIAL

	 COPPER	 GALVANIZED	 LEAD	 PLASTIC/HDPE/PVC
SCRATCH RESULT	Copper or orange Result	Dull gray	Shiny silver	Matches pipe surface
MAGNET RESULT	No	Yes	No	No
TAPPING RESULT	Metallic, ringing noise	Metallic, ringing noise	Dull noise	Dull, plastic noise

Scan the QR code to take the survey:
https://bit.ly/BaltimoreSelfReportingSurvey

If the test shows your drinking water supply line or piping is made of lead, and you wish to have your water tested, contact DPW. Information about lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water. Until we can confirm if lead is present, you can also use a filter sanctioned by an American National Standards Institute accredited certifier to reduce lead in drinking water.



PROTECTING YOUR DRINKING WATER: LEAD

Here's How to Reduce Your Exposure to Lead

- **Flush cold water from your tap before drinking or cooking to help remove stagnant water, especially after long periods of non-use.**
- **How to flush pipes:** Run cold water from your kitchen faucet, shower, or your washing machine and dishwasher while empty.
- **When to flush:** First thing in the morning or when you return home from work.
- **How long to flush:** Run water from a faucet, shower, or appliance for 3-5 minutes daily.
- **Regularly clean faucet aerators and showerheads to help reduce buildup.**
- **Faucet tips (aerators) are the small mesh screens at the end of faucets where water flows out. They can collect build-up over time.**



LEGIONELLA AWARENESS

Legionella is a type of bacterium commonly found in natural environments, such as reservoirs, lakes, and streams. Legionella can cause a pneumonia-like illness called Legionnaires' Disease or a milder form of the disease called Pontiac Fever. Legionella has been detected in homes and buildings, where warm, stagnant, and untreated water can promote bacterial growth. Individuals can become infected by inhaling small water droplets or mist containing the bacteria, or by aspirating drinking water (when water enters the airway during coughing or choking).

Legionella does not infect most people; however, older adults and people with underlying conditions are more susceptible to infection. For example, those at risk include:

- **50 years of age or older**
- **Current or former smokers**
- **Have chronic lung diseases such as asthma, COPD, or emphysema**
- **Have a weakened immune system from diseases such as cancer, diabetes, kidney failure or autoimmune disease**
- **People who take medications that weaken the immune system, such as medications used during chemotherapy or medications taken after an organ transplant**

PROTECTING YOUR DRINKING WATER: LEGIONELLA

To prevent exposure to Legionella and other bacteria in your household water system, especially after water main work and boil water advisories:

- **Ensure hot water heaters operate properly by performing regular flushing and maintaining a minimum outlet water temperature of 130°F.**
- **Flush all hot and cold-water lines regularly, including exterior faucets and attached hoses.**
- **Remove and clean faucet aerators, screens, and showerheads regularly.**
- **Install a water filtration system designed to remove Legionella bacteria, such as an absolute 0.2-micron (µm) hollow-fiber membrane filter certified for bacterial removal.**
- **Ensure water-using devices, including humidifiers and decorative fountains, are cleaned, disinfected, and maintained regularly.**
- **Always use fresh water and avoid leaving water sitting in these devices for extended periods.**

Why This Matters

These steps can help reduce exposure to contaminants associated with aging water mains and plumbing systems. This is especially important for households with young children, the elderly, pregnant individuals, and those with underlying health conditions.

Use Water Wisely

We are asking Baltimore region residents to make simple, voluntary changes to help protect our water supply, especially during times of drought when reservoir levels are low.

- **Take short showers.**
- **Turn off the faucet while brushing your teeth.**
- **Operate dishwashers and washing machines only when they are fully loaded.**
- **Delay watering lawns and gardens.**
- **Limit the washing of cars, boats, and outdoor surfaces.**
- **Repair any leaky faucets, hoses, or sprinklers.**



Romeko Morton

Construction Project Supervisor for the Urgent Response Section of the Office of Engineering and Construction

Romeko Morton oversees emergency response operations, including water main breaks, utility incidents, and water valve and hydrant replacements. Each day begins with reviewing data, tracking ongoing work, and ensuring projects are completed efficiently and accurately.

He also encourages his crews to approach every job with care and professionalism. For Morton, the job is about leading by example and contributing to the wellbeing of Baltimore City through dependable public service.



GLOSSARY

TERM	DEFINITION
AL	Action Level
Arsenic	A gray, semi metallic element that occurs naturally, which can be found in certain types of rock and soil.
CCR	Consumer Confidence Report
Chlorine	Added to water to control the growth of bacteria and viruses.
DPW	Department of Public Works
E. coli	Escherichia coli
EPA	Environmental Protection Agency
Fluoride	A mineral added to water to prevent tooth decay.
FOG	Fats, Oils, and Grease
HAL	Health Advisory Level
HLD	Highest Level Detected
Inorganic Contaminants	Contaminants such as salts and metals that can be either naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
LCRR	Lead and Copper Rule Revisions
Lead and Copper	Enter drinking water primarily through plumbing materials.
LRAA	Locational Running Annual Avera ge
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDE	Maryland Department of the Environment
MDH	Maryland Department of Health
Microbiological Contaminants	Viruses and bacteria that come from sewage treatment plants, septic systems, agricultural and livestock operations, and wildlife.
ND	Non-Detection
NTU	Nephelometric Turbidity Units
pCi/L	Picocuries per Liter
PFAS	Per- and Poly-fluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanoic Sulfonic Acid
pH	Potential of Hydrogen
PPB	Parts per billion
PPM	Parts per million
PPT	Parts per trillion
Radioactive Contaminants	Contaminants that can be naturally occurring, or the result of oil and gas production and mining activities.
SOCs	Synthetic Organic Contaminants
Turbidity	A measure of the cloudiness of the water, used to indicate water quality and filtration effectiveness.
UCMR5	5th Unregulated Contaminant Monitoring Rule
Volatile Organic Chemicals	Byproducts of industrial processes and petroleum production, which come from gas stations, urban stormwater runoff, and septic systems.

Reporting Backups

SEWAGE ONSITE SUPPORT CLEANUP PROGRAM

WATER IN YOUR HOME?



Experiencing a basement backup? Call 311. No matter the cause, report every basement backup to 311. DPW will investigate the source, help identify solutions, and work to reduce the risk of future backups.

DPW offers FREE professional cleaning services for sewage backups. Call 311 to see if you qualify.

Scan the QR code or follow the link to learn more about the Sewage Onsite Support (SOS) Cleanup Program:

https://www.baltimorecity.gov/publicworks/sos-cleanup

Need Help Paying Your Water Bill?

PromisePay Payment Plans

To learn more about our flexible and interest-free PromisePay payment plans:

- *Visit us online at https://baltimore.promise-pay.com/*
- *Call us at 410-779-9808*

Water4All

Water4All is a water bill discount program that helps eligible Baltimore City residents reduce their monthly water bill. To learn more about this program, eligibility requirements, and how to enroll:

- *Visit us online at https://cityservices.baltimorecity.gov/water4all/*
- *Call us at 410-396-5555*

Paperless Billing

Customers will receive their bills faster and more securely, with the ability to view and access their bills anytime and anywhere. You can sign up for paperless billing in the DPW Customer Service Portal

- *https://waterbillportal.baltimorecity.gov/#Login*



Stay Connected

WEBSITE:
https://www.baltimorecity.gov/publicworks

Follow Us on Social Media!

FACEBOOK: BaltimoreCityDepartmentofPublicWorks
https://www.facebook.com/BaltimoreCityDepartmentofPublicWorks

X: @BaltimoreDPW
https://x.com/BaltimoreDPW

INSTAGRAM: @DPWBaltimoreCity
https://www.instagram.com/dpwbaltimorecity/

NEXTDOOR: Nextdoor.com/gov/BaltimoreDPW
https://nextdoor.com/agency-detail/md/baltimore/baltimore-city-department-of-public-works/

Diverse talents.
One mission.

Whether your background is in engineering, operations, skilled trades, science, finance, or beyond, your skills can make an impact.



Explore your future with us.
Submit your resume to:

DPWCareers@baltimorecity.gov.

Filtration Plant Tours



Interested in learning more about how we treat water that comes out of your pipes?

Baltimore City DPW offers free tours for our consumers, students, businesses, and anyone interested in the water filtration plants.

For a tour of the **Montebello Plant**, call **410-396-6040**, and for a tour of the **Ashburton Plant**, call **410-396-0150**.

This report contains important information about your drinking water.

Translate it, or speak with someone who understands it.

Este reporte contiene información muy importante sobre el agua que usted toma. Haga que se la traduzcan o hable con alguien que la entienda.

Este informe contiene información importante sobre la calidad de su agua potable. Conviene traducirlo o hablar con alguien que le comprenda.

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

Rapò sa a gen enfòmasyon ki enpòtan anpil sou dlo w'ap bwè a. Fè tradwi-l pou ou, oswa pale ak yon moun ki konprann sa ki ladan-l.

Ten raport zawiera bardzo istotną informację o twojej wodzie pitnej. Przetłumacz go albo porozmawiaj z kimś kto go rozumie.

В этом материале содержится важная информация относительно вашей питьевой воды. Переведите его или поговорите с кем-нибудь из тех, кто понимает его содержание.

這個報告中包含有關你的飲用水的重要信息。請將此報告翻譯成你能言語或向懂得指導你的人。

이 보고서에는 귀하의 식수에 관한 매우 중요한 정보를 포함하고 있습니다. 이 정보를 이해 하실 수 있는 분께 이 문서를 번역하거나 문의 하십시오.

इस रपिोर्ट में आपके पीने के पानी के बारे में महत्वपूर्ण जानकारी है। इसका अनुवाद करवाएं, या किसी ऐसे व्यक्ति से बात करें जो इसे समझता हो।

يتضمن هذا التقرير معلومات هامّة حول مياه الشرب الخاصة بك. لذا قم بترجمته أو تحدث مع شخص يفهمه.





BALTIMORE CITY
DEPARTMENT OF PUBLIC WORKS

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DEPARTMENT OF
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