Annual Drinking Water Quality Report

MD0010009

Water

WESTERN REGION ALLEGANY DISTRIB. SYSTEM

nnual Water Quality Report for the period of January 1 to December 31, 2023	For more information regarding this report contact:		
his report is intended to provide you with important information about your rinking water and the efforts made by the water system to provide safe rinking water.	Name		
	Phone		
VESTERN DECION ALLECANY DISTRIR SYSTEM is Durchased Surface	Este informe contiene información muy importante sobre el agua que usted		

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. EPA/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).

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. We are responsible for providing high quality drinking water, but we 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 water for drinking or 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 or at http://www.epa.gov/safewater/lead.

Source Water Information

SWA = Source Water Assessment

Source Water Name Type of Water Report Status Location

CC-MD0010011-TP01 PURCHASED - MD0010011 SW _____

2023 Regulated Contaminants Detected

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Maximum Contaminant Level or 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.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been

found in our water system.

Maximum Contaminant Level Goal or 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.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation

has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum residual disinfectant level or 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.

Maximum residual disinfectant level goal or 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.

na: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	0.5	0.4 - 0.5	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	22	8.39 - 35.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	56	19.1 - 101	No goal for the total	80	ppb	N	By-product of drinking water disinfection.



Important Information Concerning Your Drinking Water

We're pleased to present to you the Annual Water Quality Report for 2023. This report is designed to inform you about the water quality and services we deliver to you every day. Maryland Environmental Service, an Agency of the State of Maryland, began operating the water treatment facility in January 2002 and prepared this report on behalf of the City of Frostburg.

The Environmental Protection Agency (EPA) regulates Public Water Systems and the contaminants found in water through the implementation of the Safe Drinking Water Act (SDWA). The SDWA sets regulations and guidelines for how public water systems operate and identifies several hundred drinking water contaminants, establishes monitoring frequencies and limitations. The Maryland Department of the Environment (MDE) is responsible for the enforcement of the SDWA and routinely complete Sanitary Surveys as part of their ongoing inspection and monitoring program. MES provides safe dependable operations of the water system and is dedicated to consistently providing high quality drinking water that meets or exceeds the SDWA standards.

If you have any questions about this report or have questions concerning your water utility, please contact **Jay Janney at 410-729-8361**, or by e-mail at jjanney@menv.com.

For More Information:

For the opportunity to ask more questions or participate in decisions that may affect your drinking water quality, please visit the City's website at www.frostburgcity.org to find upcoming meetings of the Mayor and Council. Customers may also call 301-689-6000 for more information.

Inside This Issue:

Definitions	2
Special Points of Interest	2
Water Quality Report	3
TOC Removal	3
UCMR5 Testing	4
Sources of Drinking Water	4
Lead Prevention	4
Polyfluoroalkyl Substances	5

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. EPA/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 (1-800-426-4791).

Definitions:

- "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.
- " **Action Level** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
- "Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water
- "Turbidity Relates to a condition where suspended particles are present in the water. Turbidity measurements are a way to describe the level of "cloudiness" of the water.
- "NTU Nephelometric Turbidity Units. Units of measurement used to report the level of turbidity or "cloudiness" in the water.
- "ppb parts per billion or micrograms per liter
- " ppm parts per million or milligrams per liter
- " ppt parts per trillion or nanograms per liter

The Maryland Environmental Service (MES) operates and maintains the water treatment facility for the City of Frostburg. The facility is rated to treat 3.0 million gallons per day (MGD) and currently averages 1.2 MGD. The Frostburg water treatment facility receives raw water from numerous sources. MES maintains 29 springhouses with related collection and transmission equipment, and two deep wells in the Pocono aquifer. The balance of raw water is pumped from the Piney Dam reservoir in Garrett County. All raw water sources are commingled in a one-million- gallon supply reservoir which feeds the water treatment facility. The raw water is treated using a surface water treatment plant which consists of four basic components: coagulation, flocculation, sedimentation and filtration. These processes are specifically designed to treat the water at Frostburg. The treated water is stored in two finished water reservoirs. The last steps of treatment include the addition of Chlorine for disinfection, fluoride for dental protection and a corrosion inhibitor to help maintain the distribution system.

MES provides personnel who are properly trained and licensed to operate and maintain the water treatment facility and related equipment in accordance with all applicable regulations. The operational tasks include daily visits to the water treatment facility, checking the facility, performing daily process testing, performing daily, weekly, and monthly calibrations/maintenance, performing all outside grounds maintenance, and continuing on-going quality control and preventative maintenance programs. The Maryland Environmental Service procures all necessary supplies and materials outlined in the operating budget for the efficient control of treatment, compiles and submits all reports required by Local, State, and Federal Regulatory Agencies and provides response 24 hours per day in the event of emergency situations such as an equipment malfunction.

Special Points of Interest:

- The water at Frostburg is tested for over 100 different compounds.
- The City of Frostburg's drinking water met all State and Federal requirements.

City of Frostburg PWSID: 001-0011 Page 2

Highest Level

Ideal Coal

Highest Level Allowed

	Hignest Level Allowed		ideai Goai			
Contaminant	EPAs MCL	Detected	(EPA's MCLG)			
Regulated at the Treatment Plant						
Nitrate	10 ppm	1.5 ppm	10 ppm			
Typical Sources of Contaminant: Ru	noff from the use of fertilizer	Range (1.5 to 1.5 ppm)				
Fluoride 4.0 ppm		0.52 ppm	4.0 ppm			
Typical Sources of Contaminant: Ad	ded for dental protection	Range (0.52 to 0.52 ppm)				
Barium 2 ppm		0.052 ppm	2 ppm			
Typical Sources of Contaminant: Erosion of natural deposits		Range (0.052 to 0.052 ppm)				
Chlorine 4 ppm		1.07*	4 ppm			
Typical Sources of Contaminant: Ad	ded for microbial protection	Range (0.97 to 1.38) * Average				
Regulated in the Distribution						
System	EPAs MCL	Detected	(EPA's MCLG)			
Total Trihalomethanes (TTHM)	80 ppb	(Range 24.4 - 76.8)* 52 ppb*	N/A			
Haloacetic Acids (HAA5)	60 ppb	(Range 11.9 - 26)* 18 ppb**	N/A			
Typical Source of Contaminants: By-product of drinking water disinfection						
* Highest Individual Result from a Single Location						
** Four monitoring sites are individually averaged and reported quarterly. Compliance is determined on a						
Locational Rolling Annual Average (LRAA) of the individual sites. Value reported is the highest LRAA during 2023.						

Treatment Technique

Turbidity TT = filtration 0.3 NTU (Range 0.02- 0.18) Average 0.08 NTU

Typical Source of Contaminant: Soil Runoff

Turbidity cannot exceed 1.0 NTU and must be less than or equal to 0.3 NTU taken each monthin at least 95% of the measurements.

The water plant consistently met all of the turbidity requirements in 2023.

Regulated at the Consumer's Tap	Action Level	Detected	(EPA's MCLG)
Copper - (2021 Testing)	1.3 ppm	0.08 ppm*	1.3 ppm
Lead - (2021 Testing)	15 ppb	0.0 ppb*	0.0 ppb
Typical Source of Contaminant: Corr	rosion of household plumbing	* 90th Percentile	

The table above lists all the drinking water contaminants that were detected during the 2023 calendar year.

The presence of these compounds in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table is from testing done January 1 – December 31, 2023. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Total Organic Carbon (TOC)

The percentage of Total Organic Carbon (TOC) removal was measured each quarter, and the system met all TOC removal requirements. During 2023 the minimum required TOC removal rate was between 49% to 55%. The average removal rate during 2023 was 53%.

Fifth Unregulated Contaminant Monitoring Rule (UCMR5)

The Environmental Protection Agency (EPA) required unregulated contaminants to be monitored. UCMR5 testing consisted of 29 PFAS parameters and lithium for all public water systems. The City of Frostburg tested for UCMR5 and all of the results were less than the maximum reporting limits.

Sources of Drinking Water

The sources of drinking water (both tap water and bottled 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 animals or from human activity. Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of some compounds. The presence of these compounds 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 (EPA's) Safe Drinking Water Act Hotline (1-800-426-4791).

The Maryland Department of the Environment has performed an assessment of the source water. You may read this source water assessment by contacting the City's office.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain compounds in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Lead Prevention

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. The City of Frostburg Water Treatment Plant 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 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, please contact jjanney@menv.com for a list of laboratories in your area that provide drinking water testing. 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.

City of Frostburg PWSID: 001-0011 Page 4

Contaminants That May Be Present in Source Water

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

Polyfluoroalkyl Substances

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 fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx. No PFAS sampling was conducted for Frostburg Water Treatment System during 2023.

The Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in March 2023. The MCLs for PFOA and PFOS are proposed to be 4.0 parts per trillion (ppt). The proposal for HFPO-DA (GenX), PFBS, PFNA and PFHxS is to use a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

Thank you for another great year of water quality!

