Annual Drinking Water Quality Report for 2023

Caroline Acres MHP, Maryland PWSID# 005-0204

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

The sources of our drinking water are three wells drilled into the Piney Point aquifer, which lies about 400 feet below the earth's surface. An aquifer is an underground body of water, which is tapped by drilling wells and pumping the water to the surface for distribution. As water travels over the land or underground it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances.

The 400 feet of earth between surface sources and this aquifer helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into your water distribution system.

We are pleased to report that our drinking water meets Federal and State requirements. The following report is provided in compliance with Federal regulations and will be provided annually each year. This report outlines the quality of our finished drinking water and what that quality means.

If you have any questions about this report or concerning your water utility, please contact the Park Manager at (410) 482-6627. We want our valued customers to be informed about their water utility.

The Caroline Acres MHP Water Department routinely monitors for contaminants in your drinking water in accordance with Federal and State laws. The tables on the following pages show the results of our monitoring for the period of January 1st to December 31st, 2023.

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. Caroline Acres MHP 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, contact the Caroline Acres Park Manager at (410) 482-6627. 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.

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter of fluoride may develop cosmetic discoloration of their permanent teeth. The drinking water provided by your community water system, Caroline Acres, has a fluoride of 2.2 mg/L (highest detected level). Dental fluorosis, in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with an alternative source of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth you may also want to contact your dentist about proper use by young children of the fluoride-containing products. Older children and adults may safely drink the water. Drinking water containing 4 mg/L of fluoride can increase your risk of developing bone disease. Your drinking water does not contain 4 mg/L of fluoride but we are required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/L because of this cosmetic dental problem.

Definitions

In this report you will find some terms and abbreviations that you might not be familiar with. To help you better understand these terms we are providing the following definitions:

Parts per million (ppm): one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb): one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/l): a measure of radioactivity

Maximum Contaminant Level (MCL): The "Maximum Allowed" is 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 "Goal" is 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 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.

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.

Detected Contaminants Not in Violation of the MCL							
Contaminant	Year Sample Collected	Highest Level Detected	MCLG or MRDLG	MCL, MRDL or AL	Units	Violation	Likely Source of Contamination
Copper	2023	0.01	1.3	1.3 (AL)	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing.
Chlorine	2023	1.4	4 (MRDLG)	4 (MRDL)	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	2.63	No goal	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	11.5	No goal	80	ppb	No	By-product of drinking water chlorination.
Arsenic	2023	7.5	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Chromium	2022	1	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2022	2.2	4	4.0	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories.
Beta/photon emitters	2018	4	0	50	pCi/L	No	Decay of natural and man-made deposits.
Gross Alpha	2018	2	0	15	pCi/L	No	Erosion of natural deposits.

Caroline Acres MHP is required to provide information on any regulated and unregulated contaminants that were detected in the finished water supply. None of the detected contaminants exceeded the Maximum Contaminant Level (MCLs).

Violations: In 2023, we received a violation for the failure to submit the Lead and Copper Monitoring Report Form on time. The form was submitted to the State in January 2024, and the State has accepted the results.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (1-800-426-4791).

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791). Please call our office if you have questions.

The source water assessment performed by MDE is available upon request, and on the MDE website: http://www.mde.state.md.us/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/ce.aspx

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PFAS Monitoring Program Update

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.

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.

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.