Annual Drinking Water Quality Report for 2022

Midlothian Water Company
June 11, 2023
MD0010023

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality 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. Our water source is from two 150 ft wells located on land owned by the water company.

I'm pleased to report that our drinking water is safe and meets federal and state requirements.
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 (800-426-4791).

If you have any questions about this report, your water utility or would like a copy of this report please contact Dale Walker at 240-362-5273. We want our valued customers to be informed about their water company. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Thursday in January and again in July at the Midlothian Church.

Midlothian Water Company routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1, 2022 to December 3 l, 2022. 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. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/I) – one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts-per billion (ppb) or Micro grams per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts-per trillion (ppt) – one part per trillion corresponds to 1 second in 32,000 years or 1 drop of food coloring in18 million gallons.

Non-detect (ND) – refers to a laboratory sample result below the detection limit.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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 treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) 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 - The "Goal" (MCLG) 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.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Fecal coliform and E.coli	N	<1		0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	Human and animal fecal waste
Turbidity range average	N N	.10-.12 .11		n/a	TT	Soil runoff
Disinfection Byproducts and Disinfectants						

Total Trihalomethanes (2020)	N	<1.00	ppb	0	80	Byproducts of drinking water disinfection
Haloacetic Acid (2020)	N	<1.00	ppb	0	60	" "
Chlorine	N	0.7-0.9	ppm	4	4	Water additive used to control microbes
Inorganic Contaminants						
Barium	N	0.164	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper (2020)	N	0.088	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits;
Lead (2020)	N	0.0011	ppm	0	AL=15	leaching from wood preservatives
Nitrate	N	0.3	ppm	10	10	Runoff from fertilizer; leaching from septic tanks, sewer
Fluoride	N	0.14	ppm	4	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Synthetic Organic Contaminants Including Pesticides and Herbicides						
None this year	N					
Unregulated Contaminants						
Sodium 2021	N	1.80	ppm	n/a	n/a	Erosion of natural deposits
PFAS 2021	N	ND	ppt	n/a	n/a	Human-made chemicals found in some soils
pH (min./max.) Average	N	6.9/7.2 7.1		n/a	n/a	Erosion of natural deposits

Note: All test results are for year 2022 unless otherwise indicated; not all contaminants require yearly testing.

A source water assessment has been performed by the Maryland Department of the Environment and is accessible on their website at: https://mde.maryland.gov/programs/Water/water supply/Source Water Assessment Program/Pages/by county.aspx

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. Midlothian water system 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 water for drinking and cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead drinking water, testing and methods and steps

you can take to minimize exposure is available from EPA Safe Drinking Water Hotline at (1-800-426-4791).

PFAS-short for per-and polyfluoroalkyl substances-refers to a large group of over 4,000 human made chemicals used since the 1940s in products, including stain and water resistant fabrics and carpeting, cleaning products, paints, cookware and firefighting foams. These uses have led to PFAS entering our environment, where they have been measured in several states in soil, surface water, groundwater and seafood, Some PFAS can last a long time in the human body and can accumulate in the food chain.

Currently, there are no federal regulations (MCLs) for PFAS in drinking water. However, the US Environmental Protection Agency has issued a Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the sum of PFOA and PFAS concentrations in drinking water. While not an enforceable regulatory standard, when followed, the EPA HAL does provide drinking water customers with a margin of protection from lifetime exposure to PFAS and PFOS in drinking water. Beginning in 2020 the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. The combined PFOA and PFAS concentration from samples taken in our water system was ND ppt (below detection limit). MDE anticipates that the EPA will establish an MCL for PFOA and PFAS in the near future. This would entail additional monitoring. Additional information about PFAS can be found on the MDE website: mde.maryland.gov

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels
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All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. 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.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

Please don’t hesitate to call or bring your concerns to the meetings.