Annual Drinking Water Quality Report for 2024
Midlothian Water Company
June 16, 2025
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, 2024 to December 3 l, 2024. 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 (2023)	N	<1.00	ppb	0	80	Byproducts of drinking water disinfection
Haloacetic Acid (2023)	N	<1.00	ppb	0	60	" "
Chlorine	N	0.6-0.7	ppm	4	4	Water additive used to control microbes
Inorganic Contaminants						
Barium	N	0.168	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper (2023)	N	0.119	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2023)	N	0.0010	ppm	0	AL=0.015	
Nitrate	N	0.708	ppm	10	10	Runoff from fertilizer; leaching from septic tanks, sewer
Fluoride	N	0.249	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					

Violations

Violation Period	Analyte	Violation Type	Violation Explanation
10/16/2024 - 4/26/2025	LEAD AND COPPER RULE REVISIONS	LSL INVENTORY-INITIAL	We failed to complete and/or submit our initial service line inventory that was due to MDE by October 16, 2024.
10/16/2024 - 4/26/2025	LEAD AND COPPER RULE REVISIONS	LSL REPORTING-INITIAL	We failed to complete and/or submit our initial service line inventory that was due to MDE by October 16, 2024.

Unregulated Contaminants						
Sodium	N	2.24	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 2024 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

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 Company 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 in 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 Midlothian Water Company at 240-362-5273. 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.

An initial inventory of service line pipe materials located within our service area was required to be submitted to the Maryland Department of the Environment (MDE) by October 16, 2024. Our initial inventory was submitted to MDE on 04/26/2025. The report was late due to the lengthy time taken to correctly identify all service lines in the water system.

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.

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.

The combined PFOA and PFAS concentrations from samples taken in our water system was ND ppt (below detection limit) as seen in the above table.

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.

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.