

2023 Annual Drinking Water Quality Report

Naylor Mill Village

MD0220221

In compliance with Safe Drinking Water Act amendments by Congress of 1996 and subsequent Federal and State regulations, Naylor Mill Village is pleased to provide this annual water quality report for calendar year 2022. Naylor Mill Village routinely monitors for contaminants in your drinking water. The source of drinking water is from ground water and is serviced by two wells. 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

For more information on the source of your water and the significant potential sources of contamination, contact the Maryland Water Supply Program at the Maryland Department of the Environment at (410) 537-3000 or visit the web: https://mde.maryland.gov/programs/Water/water_supply/Pages/index.aspx.

Is my water safe?

We are very pleased to provide you with this year's Annual Quality Water 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 and vigilantly safeguard our water supplies. We are proud to report that our system is not in violation of a maximum contaminant level. Our system failed to test our drinking water for Nitrate measured as Nitrogen for the second quarter of 2022. Because of this failure we cannot be sure of the quality of our drinking water during this period.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791). 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

How do we monitor for contaminants?

Naylor Mill Village routinely monitors for contaminants in your drinking water according to Federal and State laws. The below tables show the results of our monitoring for the period of January 1st to December 31st, 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 contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

Why may there be contaminants in my drinking water?

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 water poses a health risk. More information 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 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.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

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

Important Drinking Water Definitions:

MCLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risks for safety. MCLG allows for margin of safety.

MCL: Maximum Contaminant Level. 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.

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

ALG: Action Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

MRDLG: Maximum Residual Disinfectant Level Goal. 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 microbe contaminants.

MRDL: Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbe contaminants.

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

Level 1 Assessment: 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.

Level 2 Assessment: 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.

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

HBWCs: Health Based Water Concentrations

Units of Measurement & Conversions:

NA: Not applicable

ppm: parts per million, or milligrams per liter (mg/L)

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

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: parts per billion, or micrograms per liter (µg/L)

ppt: Parts per trillion, or nanograms per liter (ng/L)

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminant	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# sites over AL	Units	Violation	Typical Source
Copper	2020	1.3	1.3	0.31	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2020	0	15	8.1	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

Contaminant (units)	Collection Date	MCLG	MCL	Highest Level Detected	Range		Violation	Typical Source
					Low	High		

Disinfectants and Disinfection By-Products:

Chlorine (ppm)	2022	MRDLG=4	MRDL=4	0.8	0.7	0.8	No	Water additive used to control microbes
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Inorganic Contaminants:

Nitrate as Nitrogen (ppm)	2022	10	10	6	5.1	6.4	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
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Radioactive Contaminants:

Radium 228 (pCi/L)	7/2022	0	5	0.3	0.3	0.3	No	Erosion of natural deposits
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*EPA considers 50pCi/l to be the level of concern for beta particles

Contaminant (units)	Collection Date	MCLG	MCL	Highest Level Detected	Range		Violation	Typical Source
					Low	High		

Unregulated Contaminants: Proposed Regulation as of March 2023

PFOA (ppt)	2022	0 (Proposed)	4 (Proposed)	4.7	4.7	4.7	n/a	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
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PFOS (ppt)	2022	0 (Proposed)	4 (Proposed)	83.6	83.6	83.6	n/a	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
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Contaminant (units)	Collection Date	MCLG Hazard Index (unitless)	MCL Hazard Index (unitless)	Highest Level Detected (ppt)	HBWC (ppt)	Range		Violation	Typical Source
						Low (ppt)	High (ppt)		

Unregulated Contaminants: Proposed Regulation as of March 2023

PFBS (ppt)	2022	1 (Proposed)	1 (Proposed)	1.3	2000 (Proposed)	1.3	1.3	n/a	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
PFHxS (ppt)	2022	1 (Proposed)	1 (Proposed)	43.6	9 (Proposed)	43.6	43.6	n/a	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

Violation:

Nitrate (measures as Nitrogen)

Violation Type	Violation Begin	Violation End	Violation Explanation
Monitoring, Routine major	4/1/2022	6/30/2022	We failed to test our drinking water for Nitrate measured as Nitrogen for the second quarter of 2022. Because of this failure we cannot be sure of the quality of our drinking water during the period indicated.

Copper

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Lead

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. Naylor Mill Village 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 W.T.H., Inc, Erika Campbell at 410 749 5822. 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>

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort

Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Radium 228

Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

PFAS

PFAS – or 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.

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. PFOA and PFOS are two of the most prevalent PFAS compounds. PFOA and PFOS concentrations from samples taken from our water system in 2022 were **4.7** parts per trillion (ppt) and **83.6** ppt, respectively. In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs or Hazard Index. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: <https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>

Naylor Mill Village

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Prepared by: Water Testing Labs of Maryland, Inc.

For more information on contaminants in drinking water and its effects go to www.wtlmd.com