

# 2022 Annual Drinking Water Quality Report

## Tebbston on Magothy (PWSID MD0020059)

We are pleased to present the 2022 Calendar Year Drinking Water Quality Report completed in June of 2023. 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. TSC/Magothy Associates, LP and Sanford Management Services, LLC are committed to ensuring the quality of your water.

The source of our drinking water is the Magothy Aquifer, which lies approximately 142 feet below the ground. An aquifer is like an underground reservoir or deposit of water that is tapped by drilling wells and pumping the water to the surface for distribution. The 142 feet of ground between surface sources of contamination and this underground source helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into your distribution system.

A source water assessment was performed by the Maryland Department of the Environment (MDE). This assessment outlines the potential sources of contamination for our raw water supply. The final report was issued in the winter of 2003. A copy can be obtained through Anne Arundel County Department of Planning and Zoning, Anne Arundel County Public Libraries, or MDE.

It was determined that the Tebbston on Magothy water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring radionuclides and naturally occurring iron.

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

Tebbston on Magothy routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the following page shows the results of our monitoring for the period of January 1<sup>st</sup>, 2022 to December 31<sup>st</sup>, 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*

*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.

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 (800) 426-4791. The presence of some contaminants in drinking water is unavoidable, but we make every effort to keep our water at or below the levels specified by law as being safe for consumption.

### Definitions

In this report 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/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

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.

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 and are non-enforceable public health goals.

# Violation Notification for all Residents

We are required to disclose to all residents in the Tebbston community that there was a Lead and Copper violation. This violation has been corrected and we are now in active compliance with all MDE monitoring and disclosure regulations that apply to our property.

<b>Consumer Confidence Rule</b>			The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
CCR Report	07/01/2022	09/28/2022	We failed to provide you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.
<b>Ground Water Rule</b>			The Ground Water Rule specifies the appropriate use of disinfection while addressing other components of ground water systems to ensure public health protection.
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
Failure Address Deficiency (GWR)	02/21/2022	2022	We failed to properly respond to a significant deficiency in our water system.
<b>Public Notice Rule</b>			The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency)
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
Public Notice Rule Linked to Violation	10/28/2021	2022	We failed to adequately notify you, our drinking water customers, about a violation of the drinking water regulations.

## 2022 Regulated Detected Contaminants NOT in Violation of the MCL

The data presented in this table is from testing performed between October 2006 and December 2022. Some regulated contaminants are monitored less frequent than once per year. In addition to over one hundred *undetected* substances that were subject to testing, Tebbston on Magothy did find some regulated and unregulated substances present in the water system at levels below the maximum allowable level (MCL), which is determined safe by the EPA. These substances are shown below, along with the MCL and MCLG for each contaminant detected (if applicable).

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Contaminant	Date Sample	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites over AL	Units	Likely Source of Contamination
Lead & Copper							

Copper	09/24/ 2019	1.3	1.3	0.191	0	ppm	Erosion of natural deposits; Leaching from wood preservative Corrosion of household plumbing systems
Lead	09/24/ 2019	0	15	3	0	Ppb	Corrosion of household plumbing systems, erosion of natural deposits

### 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

### 2022 Regulated Contaminants Detected

#### Coliform Bacteria

Max. Contaminant Level Goal	Total Coliform Max. Contaminant Level	Highest NO. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	2		0	N	Naturally present in the environment

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2022	0.1	0.1- 0.1	MRDLG = 4	MRDL= 4	ppm	ppm	Water additive used to control microbes.

**Detection of these substances** in the drinking water does not constitute a known threat to public health because they were found only at levels less than the MCL and below the level that EPA currently feels may constitute a health threat. MCL's are set at very stringent levels, and Tebbston on Magothy's water has proved to be below those levels for the contaminants listed above.

**Radon** is a radioactive gas that you cannot see, taste, or smell. It is throughout the United States and can move up through the ground into a home through cracks and holes in the foundation. Radon can build to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in the air. Radon is a known human carcinogen. Radon can lead to lung cancer and stomach cancer. If you are concerned about radon in your home, test the air in your home. Fix your home if the level of radon in the air is 4 picoCuries per liter or higher. For information, call EPA's Radon Hotline at (800) SOS-RADON.

Some people may be more vulnerable to contaminants in the drinking water than the general

population. Immuno-compromised persons, such as those people 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.

#### Lead

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. Mid-Atlantic Water Systems 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 or cooking. If you are concerned about lead in your drinking 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

**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 remember to conserve water!***

**Cheryl Jameson, as agent for Owner  
301-596-0222  
Tebbston on Magothy**

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The MCL for Gross Beta is 4 millirems per year. EPA considers 50 pCi/L to be the level of concern for Gross Beta.

- <sup>a</sup> Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.
- <sup>b</sup> EPA is considering establishing the MCL for <sup>222</sup>Radon between 300 pCi/L and 4,000 pCi/L.
- <sup>c</sup> The National Secondary Drinking Water Regulation for sulfate, which is an unenforceable standard, is 250 mg/L.
- <sup>d</sup> The MCL for combined Uranium is 30 ppb. The conversion from ppb to pCi/L varies depending upon the concentrations of the constituent isotopes, but is always less than 30 pCi/L.

### **CCR PFAS Statement without test results in 2022:**

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. Our water system was not tested for PFAS in 2022. 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. 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:

[mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx](https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.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. Tebbston on the Magothy 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 Phelps Water Co. at 410-956-2522. 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>.

