Annual Drinking Water Quality Report for 2023
Town of Manchester
PWSID #0060006

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

We are very 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 our water resources. We are committed to ensuring the highest quality of your water.

The **Town of Manchester** routinely monitors your drinking water for contaminants according to Federal (EPA) and State (MDE) regulatory requirements. The Water Quality Data provided in this report will provide you with the results from our monitoring for the period of **January 1st to December 31st, 2023. We are pleased to report that our drinking water is safe and meets EPA and MDE drinking water standards.** The following report is provided in compliance with Federal regulations and is provided annually. This report outlines the quality of our finished drinking water and what that quality means.

SOURCES OF DRINKING WATER:

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. Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of certain 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 **EPAs Safe Drinking Water Hotline (800) 426-4791**

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 storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water 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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. ***The source of Manchester's water supply is an unconfined fractured rock aquifer, known as the Upper Pelitic Schist. The system currently uses eighteen groundwater wells and one spring to obtain its drinking water. All of these Wells and the Walnut Street Spring are in the Gillis Group Formation Aquifer, with the exception of the Bachman Road Well which is in the Sam's Creek Formation Aquifer.***
A source water assessment was performed by the Maryland Department of the Environment (MDE) and is available on their website:
https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx

VULNERABLE POPULATIONS:

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 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 microbial contaminants are available from the **Safe Drinking Water Hotline (800-426-4791).**

INFORMATION STATEMENT FROM EPA ON LEAD:

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water primarily from materials and components associated with service lines and home plumbing. The **Town of Manchester** 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 **Rodney Kuhns, Director of Public Works at (410) 239-1482**. 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.

WHAT IS PFAS?

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) finalized regulations for 6 PFAS compounds in drinking water in April 2024. The MCLs for PFOA and PFOS are each 4.0 parts per trillion (ppt). The MCLs for PFNA, PFHxS, and HFPO-DA (GenX chemicals) are each 10 ppt. Additionally, a mixture of two or more of the following chemicals (PFNA, PFHxS, HFPO-DA, and PFBS) will be regulated with a Hazard Index of 1 (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.

Nitrate (measured as Nitrogen) 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 the rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

The Maryland Rural Water Association's State Circuit Rider assisted with the completion of this report.

We want our valued customers to be informed about their water quality. If you have any questions about this report or concerns with your water quality, please contact Rodney Kuhns, Director of Public Works at (410) 239-1482 between the hours of 8:00 AM - 4:00 PM Monday - Friday. If you want to

learn more, please attend any of our regularly scheduled Town Council meetings. They are scheduled for the 2nd Tuesday of every month at 7:00PM at the Town Hall.

In the **Water Quality Data table** shown on the following page, you will find many terms, units 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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (ng/L) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

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

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.

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.

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

ND – not detected.

NA – not applicable

WATER QUALITY DATA

INORGANIC CONTAMINANTS

Regulated Contaminants	Units	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Typical Sources
Barium	ppm	2023	0.0099	0 - 0.0099	2	2	NO	Discharge of driling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	2023	2.2	0 - 2.2	100	100	NO	Discharge from steel and pulp mills; erosion of natural deposits
Mercury	ppb	2023	0.2	0.2 - 0.2	2	2	NO	Erosion of natural deposits; Discharge from refineries and factories; Erosion of natural deposits
Nitrate (as Nitrogen)	ppm	2023	7	0.48 - 6.74	10	10	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits

RADIOACTIVE CONTAMINANTS

Regulated Contaminants	Units	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Typical Sources
Combined Radium 226/228	pCi/L	2023	0.3	0.3 - 0.3	0	5	NO	Erosion of natural deposits
Gross alpha excluding radon and uranium	pCi/L	2023	13.6	0 - 13.6	0	15	NO	Erosion of natural deposits

DISINFECTION AND DISINFECTION BY PRODUCTS

Regulated Contaminants	Units	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Typical Sources
Chlorine	ppm	2023	0.6	0.6 - 0.6	4	4	NO	Water additive to control microbes
Total Trihalomethanes	ppb	2022	5.4	5.4 - 5.4	na	80	NO	By-products of drinking water disinfection process
Haloacetic Acids	ppb	2022	1.5	1.5 - 1.5	na	60	NO	By-products of drinking water disinfection process

LEAD AND COPPER: testing is performed on samples from customers tap between June thru September

Regulated Contaminants	Units	Collection Date	90th Percentile	# Sites Over Action Level	MCLG	AL	Violation	Typical Sources
Lead	ppb	2020	3	0	0	15	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Copper	ppm	2020	0.79	0	1.3	1.3	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives