2024 Annual Drinking Water Quality Report

Town of New Market, PWSID# 2171600

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2024 is designed to provide you with valuable information about your drinking water quality. We are committed to providing you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water meets all state and federal requirements administered by the Virginia Department of Health (VDH). If you have questions about this report, want additional information about any aspect of your drinking water, or want to know how to participate in decisions that may affect the quality of your drinking water, please contact:

Mr. John Griggs, Chief Operator, Town of New Market at 540-740-9576 https://www.newmarketvirginia.com/residents/page/water-sewer	

You can obtain additional information from the Town Council meetings held at 6:30 p.m. the third Monday of each month in the Town Council Chambers at the Municipal Building.

GENERAL INFORMATION

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Substances (referred to as contaminants) in source water may come from septic systems, discharges from domestic or industrial wastewater treatment facilities, agricultural and farming activities, urban storm water runoff, residential uses, and many other types of activities. Water from surface sources is treated to make it drinkable while groundwater may or may not have any treatment.

All drinking water, including bottled drinking 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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791) and from the EPA website at https://www.epa.gov/environmental-topics/water-topics.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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). All reportable data for the water system can be searched in the public Drinking Water Viewer (DWV) database by accessing the portal at http://www.vdh.virginia.gov/drinking-water.

SOURCES AND TREATMENT OF YOUR DRINKING WATER

Treatment of Wells 1 and 6 consists of chlorination and corrosion control. As water is pumped from the wells, a chlorine solution is injected into combined well discharge line to disinfect the water prior to distribution. Treatment of Wells 2, 4, 8, and the Shenandoah Valley Academy (SVA) Well consist of membrane filtration, chlorination and corrosion control. The membrane filtration eliminates turbidity and bacteria from the water while chlorination is used to disinfect the water prior to distribution.

SOURCE WATER ASSESSMENTS

A source water assessment has been completed by the Virginia Department of Health (VDH) and last updated in 2020. The assessment determined that the well serving our community may be susceptible to contamination because they are located in an area that promotes migration of contaminants from certain land use activities of concern. More specific information may be obtained by contacting the water system representative referenced within this report.

QUALITY OF YOUR DRINKING WATER

Your drinking water is routinely monitored according to Federal and State Regulations for a variety of contaminants. The table on the next page shows the results of our monitoring for the period of January through December 31, 2024. Most of the results in the table are from testing done in 2024. However, the state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

DEFINITIONS

In this report, you will find many terms and abbreviations, which might be unfamiliar to you. The following definitions are provided to help you better understand these terms:

Action Level (AL): 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.

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

Maximum Residual Disinfectant Level Goal (MRDLG): 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 microbial contamination.

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

Non-detects (ND): Lab analysis indicates that the contaminant is not present

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.

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.

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

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

Variances and exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

WATER QUALITY RESULTS

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The tables list only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

Maximum Contaminant Levels (MCLs) are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards, EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for

other contaminants.

Turbidity

Contaminant	MCLG	MCL	Highest Level	Lowest Monthly % < 0.3 NTU	Violation	Date of Sample	Typical Source
Turbidity (NTU)	NA	TT (1)	0.112	100	No	Daily 2024	Soil Runoff

(1) Turbidity Treatment Technique (TT) MCL: 1 NTU max; ≤ 0.3 NTU in at least 95% of all samples tested. Turbidity is measure of the cloudiness of the water. We monitor it because it is a good indicator of our water quality and the effectiveness of filtration process.

Inorganic Contaminants

Contaminant	MCLG	MCL	Level Found (Range)	Violation	Date of Sample	Typical Sources
Barium (mg/L)	2	2	0.027 (0.022 – 0.027)	No	2024	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (mg/L)	10	10	6.07 (4.03 – 6.07)	No	2024	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Radiological Contaminants

Contaminant	MCLG	MCL	Level Found (Range)	Violation	Date of Sample	Typical Sources
Alpha Emitters (pCi/L)	0	15	1.1 (ND – 1.1)	No	2024	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
Beta Emitters (pCi/L)	0	4 mrem/yr *	2.3 (0.8 – 2.3)	No	2024	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Combined Radium (pCi/L)	0	5	2.3 (1.3 – 2.3)	No	2024	Erosion of natural deposits

* The MCL for beta particles is 4 mrem/yr. EPA considers 50 pCi/L to be the level of concern for beta particles.

Disinfectant Residual

Disinfectant	MRDLG	MRDL	Level Found (Range)	Violation	Date of Sample	Typical Sources
Chlorine (mg/L)	4	4.0	1.2 (0.92 – 1.41)	No	2024 Daily	Water additive to control microbes.

Disinfection Byproduct Contaminants

Contaminant	MCLG	MCL	Level Found (Range)	Violation	Date of Sample	Typical Sources
Total Trihalomethanes (ppb)	NA	80	4.2	No	2024	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NA	60	1.3	No	2024	By-product of drinking water chlorination

Lead and Copper

Contaminant	MCLG	MCL	90th Percentile, (Range)	AL Exceeded	Date of Sample	Typical Sources
Lead (ppb)	0	AL = 15.0	ND (all were ND) 0 of 10 samples exceed AL	No	2024	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	AL = 1.3	0.244 ppm, (0.07 – 0.29) 0 of 10 samples exceed AL	No	2024	Corrosion of household plumbing systems; Erosion of natural deposits

Unregulated Contaminants

Contaminant	MCLG	MCL	Level Found Range	Violation	Date of Sample	Typical Sources
Sodium (mg/L)	-	-	6.42 – 9.01	No	2024	Erosion of natural deposits; de-icing salt runoff; water softeners

Sodium - There is presently no established standard for sodium in drinking water. An EPA advisory recommends water containing 30 to 60 mg/L should not be used as drinking water due to esthetics such as taste and color. Water containing more than 20 mg/L should not be used by persons whose physician has placed them on severely restricted sodium diets.

LEAD INFORMATION

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. The Town of New Market 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 Mr. John Griggs 540-740-9576. 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 .

SERVICE LINE INVENTORY INFORMATION

In 2024 we developed a service line inventory as required by the EPA Lead and Copper Rule Revisions. None of our service lines are known to be made of lead or lead containing materials. Please call the phone number at the top of the report for details on how to access the service line inventory.

Violation Information
We were in full compliance with all monitoring, reporting, water quality requirements and no violations occurred during the calendar year 2024.

The waterworks owners prepared this Drinking Water Quality Report with the assistance and approval of the Virginia Department of Health (VDH). Please call if you have questions.

Signature: _____

Date: 06/10/2025