2024 Annual Drinking Water Quality Report
City of Buena Vista PWSID# 2530125

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2024 is designed to provide you with valuable information about your drinking water quality. The City of Buena Vista is 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), Office of Drinking Water.

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:

Corey Henson, Public Works, at (540) 261-1444
https://www.buenavistava.org/residents/water-and-sewer/

GENERAL INFORMATION

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 can pick up substances resulting from the presence of animal activity, including human. Contaminants that may be present in source water include: (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (2) 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; (3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; (4) Organic chemical contaminants, including synthetic and volatile organic chemicals and pharmaceuticals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, sewage treatment plants and septic systems; (5) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Water from surface sources is treated to make it drinkable while groundwater may or may not have any treatment. 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).

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).

SOURCES AND TREATMENT OF YOUR DRINKING WATER

Your drinking water is a mixture of groundwater from three wells and groundwater under the direct influence of surface water from one well. All water is disinfected with chlorine, treated for corrosion control and fluoridated.

Water from the well under the direct influence of surface water is also filtered.

SOURCE WATER ASSESSMENT

A source water assessment was completed by VDH and last updated in 2024. This assessment determined that the well and surface influenced water sources may be susceptible to contamination. More specific information may be obtained by contacting the water system representative listed above.

QUALITY OF YOUR DRINKING WATER

Your drinking water is routinely monitored according to Federal and State Regulations for a variety of contaminants. The tables that follow show the results of our monitoring for the period of January 1, 2024 through December 31, 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, is more than one year old.

DEFINITIONS

In the table and elsewhere in this report you will find many terms and abbreviations with which you might not be familiar. 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): The substance was not found by laboratory analysis.

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

INORGANIC CONTAMINANTS						
Contaminant (Unit)	MCLG	MCL	Level Found (Range)	Violation	Date	Typical Source of Contamination
Barium (ppm)	2	2	0.032 (0.011 – 0.032)	No	2024	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4.0	4.0	0.84 (ND – 0.89)	No	Monthly 2024	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.73 (ND – 0.73)	No	2024	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
RADIOLOGICAL CONTAMINANTS						
Contaminant (Unit)	MCLG	MCL	Level Found (Range)	Violation	Date	Typical Source of Contamination
Alpha Emitters (pCi/L)	0	15	1.1 (0.4 – 1.1)	No	2022	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 *	2.1 (ND – 2.1)	No	2022	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	2.4 (0.4 – 2.4)	No	2022	Erosion of natural deposits

TURBIDITY							
Contaminant (Unit)	MCLG	MCL	Highest Level Found	Lowest Monthly % < 0.3 NTU	Violation	Date	Typical Source of Contamination
Turbidity (NTU)	NA	TT[1]	1.0	99%	No	Daily	Soil Runoff

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

1 Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of our water quality and the effectiveness of the filtration process. At no time can turbidity go higher than 1 NTU and samples must be less than or equal to 0.3 NU in at least 95% of the ample each month.

DISINFECTION BYPRODUCTS						
Contaminant (Unit)	MCLG	MCL	Level Found (Range)	Violation	Date	Typical Source of Contamination
Total Trihalomethanes (ppb)	NA	80	7.6 (ND – 7.6)	No	2024	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NA	60	3.3 (ND – 3.2)	No	2024	By-product of drinking water chlorination
DISINFECTANT RESIDUAL						
Contaminant (Unit)	MRDLG	MRDL	Level Found (Range)	Violation	Date	Typical Source of Contamination
Chlorine (ppm)	4	4.0	1.1 (0.89 – 1.41)	No	Daily & Monthly	Water additive used to control microbes

LEAD AND COPPER						
Contaminant (Unit)	MCLG	MCL	Level Found (Range)	Exceedance	Date	Typical Source of Contamination
Lead (ppb)	0	AL=15	1.9 (ND – 6.9) 0 of 20 exceeded AL	No	2023	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	AL=1.3	0.553 (ND – 1.26) 0 of 20 exceeded AL	No	2023	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED CONTAMINANT						
Contaminant (Unit)	MCLG	MCL	Level Found	Exceedance	Date	Typical Source of Contamination
Sodium (ppm)	NA	NA	0.6 - 2.01	NA	2024	Erosion of natural deposits; De-icing salt runoff; Water softeners

RESULTS INFORMATION

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The table lists 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.

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 City of Buena Vista 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 the City of Buena Vista, Corey Henson (540) 261-1444. 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

A service line inventory has been prepared as required by the US EPA Lead & Copper Rule Revisions. To access the inventory, please contact the City of Buena Vista at (540) 261-1444.

VIOLATION INFORMATION

Water Quality Violations – None

Monitoring and Reporting Violations - None

Treatment Technique Violations

TT Violation	Explanation	Length	Steps Taken to Correct the Violation	Health Effects Language
Failed to develop and submit the initial lead service line inventory by October 16, 2024.	We were required to develop and make publicly available an initial inventory of service lines connected to our distribution system by October 16, 2024. We failed to develop and submit this initial inventory of service lines to the Virginia Department of Health by October 16, 2024.	131 days	We submitted the initial service line inventory to VDH on February 24, 2025.	Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

This Drinking Water Quality Report was prepared by the City of Buena Vista with the assistance and approval of the Virginia Department of Health. Please call at the number at the top of the report if you have questions.

Signature: _____Date: _____

City of Buena Vista