Annual Drinking Water Quality Report for 2022

Village of Cuba

17 East Main St. Cuba, New York 14727

(Public Water Supply ID# NY0200317)

Inside this report:

Introduction

In order to comply with State regulations, the Village of Cuba, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, we conducted tests for 80 contaminants. We detected 6 of those contaminants and found lead to be the only contaminant at a level higher than the State allows. As we told you, our water has temporarily exceeded a drinking water standard, and we are directing our attention to rectify this problem. We are doing additional sampling to evaluate our sources, water chemistry, and distribution system for lead. When sampling results are available, we will know how where to focus our response. The Village is already planning a large distribution project starting in 2023, but will implement corrosion control treatment (for lead and copper) if sample results determine this is necessary. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Rick Hall, Superintendent of Public Works/Chief Water Operator, (585)968-2487. We want you to be informed about your drinking water. The best customer is an informed customer! If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the second Monday of every month at 7 p.m. in the Village Board Room located in the Village Hall at 17 East Main Street.

Where does our water come from?

In general, 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 natural occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Facts & Figures

Our water system serves approximately 1,800 people through a little more than 800 connections. Our water source is groundwater drawn from two 70' deep drilled wells which are located at the end of Champlain Street and in Chamberlain Park. Strict regimens of chlorine residual samples are taken daily to ensure proper disinfection. The current water rate as of this publication (March 2023) is $9.25 per 1,000 gallons of water. We pumped 82,612,000 gallons of water for the calendar year which is 1,658,000 less than 2021.

Source Water Assessment

The New York State Department of Health has completed a "Source Water Assessment" for this system based on available information. Possible and actual threats to the source of drinking water for this system were evaluated. The Source Water Assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water; it does not mean that the water delivered to consumers is or will become contaminated. Please refer to the section in this Annual Water Quality Report (AWQR) entitled **"Are There Contaminants in Our Drinking Water?"** for a list of the contaminants for which the water has been tested, as well as the test results. The Source Water Assessments provide managers with additional information for protecting Source Waters into the future.

The water for this system comes from two (2) drilled wells. The Source Water Assessment has rated the wells as having high susceptibility to contamination from nitrates, petroleum products, pesticides, industrial solvents, and other industrial contaminants. These ratings are primarily due to the proximity of the wells to a federally regulated Toxic Release Inventory (TRI) facility. The fact that the wells draw water from an unconfined aquifer also contributes to the susceptibility ratings.

Please note that, while the Source Water Assessment rated the wells as having high susceptibility to bacteria, the water is disinfected before it is delivered to your home to ensure that the finished water meets New York State drinking water standards for bacterial contamination. A copy of the Source Water Assessment, including a map of the assessment area, an be obtained by calling (585)968-2487.

Are There Contaminants in Our Drinking Water?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants may include total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, and radiological and synthetic organic compounds. The table below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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 (800-426-4791) or the Allegany County Health at 585.268.9250.

Table of Detected Contaminants

Contaminant	Source	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Inorganic Compounds								
Barium	Champlain Well	No	10/7/21	0.044	mg/L	2	2	discharge of drilling wastes, metal refineries; erosion of natural deposits
Chromium	Champlain Well	No	10/7/21	3.1	ug/L	100	100	discharge from steel and pulp mills; erosion from natural deposits
Nickel	Champlain Well	No	10/7/21	0.0014	mg/L	NA	NA	erosion from natural deposits
Arsenic	Bicentenial Well	No	4/27/21	2.3	ug/L	10	10	erosion from natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	Bicentenial Well	No	4/27/21	0.132	mg/L	2	2	discharge of drilling wastes, metal refineries; erosion of natural deposits
Iron	Bicentenial Well	No	5/20/20	100	ug/L	NA	300	naturally occuring
Manganese	Bicentenial Well	No	5/20/20	21	ug/L	NA	300	naturally occuring; indicative of landfill contamination
Synthetic Organic Compounds								
Perflurobutanesulfonic acid (PFBS)	Bicentenial Well	NA	2/16/21	2.7	ng/L	NA	NA	released into the environment from widespread use in commercial and industrial applications
Perflurooctanesulfonic acid (PFOS)	Bicentenial Well	No	8/24/22	2.7	ng/L	NA	10	released into the environment from widespread use in commercial and industrial applications

Disinfection Byproducts								
Total Trihalomethanes	NA	No	8/24/22	6.5	ug/L	NA	80	by-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Lead & Copper								
Lead *2	NA	No	8/29/2022-8/30/2022	18	ug/L	0	15	corrosion of household plumbing systems; erosion of natural deposits
Copper *1	NA	No	8/29/2022-8/30/2022	0.64	mg/L	1.3	1.3	corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrates								
Nitrate	Champlain Well	No	12/15/22	0.92	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion from natural deposits
Nitrate	Bicentenial Well	No	12/15/22	2.1	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion from natural deposits

Footnote 1 – The level presented represents the 90th percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten samples were collected at your water system and the 90th percentile value was the second highest value at .64 mg/L. The action level for copper was not exceeded at any of the sites tested.

Footnote 2 – The level presented represents the 90th percentile of the ten samples collected. The action level for lead was exceeded at two of the 10 sites tested, ranging from 18 to 59 ug/L, making the 90th percentile an exceedance at 18 ug/L.

DEFINITIONS

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.

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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

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

Milligrams Per Liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million-ppm).

Micrograms Per Liter (ug/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion-ppb).

Nanograms Per Liter (ng/L): Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion-ppt).

What does this information mean?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level for lead was exceeded in two of ten samples collected. We are required to present the following information on lead in drinking water:

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. Cuba Village Public Water 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 Cuba Village Public Water at 585.968.2487. 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.

Is Our Water System Meeting Other Rules That Govern Operations?

The Cuba Village Public Water is in violation of State lead and copper control requirements due to failure to distribute public notice and initiating water quality analysis on time. The water system has completed this public notice now but is required to take other precautionary steps in 2023. We will be looking at water chemistry, sampling source water, and sampling significantly more from vulnerable areas in our distribution system. This 90th percentile lead exceedance is believed to be an isolated incident but if sampling proves otherwise we will install corrosion control treatment. Regardless, we must also include the following statement in this report: "Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink this water over many years could develop kidney problems or high blood pressure."

Lead and Copper Rule

EPA's new Lead and Copper Rule better protects children and communities from the risks of lead exposure by better protecting children at schools and childcare facilities, getting the lead out of our nation's drinking water, and empowering communities through information. Improvements under the new rule include:

- Using science-based testing protocols to find more sources of lead in drinking water.
- Establishing a trigger level to jumpstart mitigation earlier and in more communities.
- Driving more and complete lead service line replacements.
- For the first time, requiring testing in schools and child care facilities.
- Requiring water systems to identify and make public the locations of lead service lines.

Lead Service Line Inventory

Lead Service Line Inventory can be used to develop a lead service line inventory and monitor the replacement of service lines required to comply with the Environmental Protection Agency's (EPA) Lead and Copper Rule revisions. Replacing lead service lines is the best way to reduce the risk of exposure of lead in drinking water across a community. As you are aware, ahead of and in response to this exceedance, we have been working diligently to inventory your Lead Service Lines and prioritize replacement. We are getting ready to undertake a 7.3 million dollar water improvement project that will target the vulnerable areas.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. Between 2020 and 2022 did not complete all monitoring or testing for Di(2-Ethylhexyl) Adipate, Di(2-Ethylhexyl) Phthalate, Benzopyrene, Propachlor, and Disinfection Byproducts (2020 only). Therefore; we cannot be sure of the quality of your drinking water specific to these contaminants during that time.

Do I Need to Take Special Precautions?

Some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium, giardia, and other microbial pathogens are available from the Safe Drinking Water Hotline (1-800-426-4791).

Why Save Water and How to Avoid Wasting It?

Although our system has an adequate amount of water to meet present and future demands, there are several reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life.
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems, and water towers.
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid sever water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. Get more bang for your buck and load it to capacity!
- Turn off the tap when brushing your teeth.
- Check every faucet in our home for leaks. Just a slow drip can waste 15-20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch it for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year!

In Closing

Thank you for allowing us to continue to provide your family with quality drinking 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. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please all our office if you have any questions.