

ANNUAL DRINKING WATER QUALITY REPORT FOR 2023

SANDUSKY WATER SYSTEM

OPERATED BY VILLAGE OF ARCADE
17 CHURCH STREET, ARCADE, NEW YORK
(Public Water Supply ID# NY 0400350)

INTRODUCTION

To comply with State regulations, the Village of Arcade 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. We are proud to report that our system has not violated a maximum contaminant level. 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 about your drinking water, please contact Andrew Bartz, Superintendent of Public Works, at 585-492-1111 x 113. We want you to be informed. If you want to learn more, please feel free to attend any of the regularly scheduled Village of Arcade Board of Trustee meetings held the first and third Tuesdays of every month.

WHAT IS THE SOURCE OF OUR DRINKING WATER?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, 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 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 that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is one well located on Mutton Hollow Road in Sandusky. The well can produce about 300 gpm. The water is chlorinated and fluoridated prior to distribution. The water system serves approximately 336 people through 112 connections.

In 2003 the NYS Department of Health completed a source water assessment for our water system, based on available information. Possible and actual threats to the drinking waters sources 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 contamination of the source water. It does not mean that the water delivered to consumers is, or will become contaminated. See section "ARE CONTAMINANTS IN OUR DRINKING WATER?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As was mentioned before, our water is derived from a single well. The source water assessment has rated the susceptibility to contamination for this well as high from enteric viruses and nitrates; and medium-high from cations/anions (salts, sulfate), enteric bacteria, halogenated solvents, herbicides/pesticides, metals, other industrial organics, petroleum products and protozoa. The ratings for the well are due to its proximity to agricultural activities and specific aquifer characteristics. While the assessment rates our source as being susceptible to enteric bacteria, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards.

A copy of this assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

ARE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, lead and copper, trihalomethanes, haloacetic acids, volatile organic compounds, radiological and synthetic organic compounds. The table presented 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 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 Cattaraugus County Health Department at 716-701-3386. Information is also available from the EPA website: <https://www.epa.gov/dwreginfo/drinking-water-regulations>.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Disinfectant							
Chlorine Residual	No	2023	Avg. = .53 (.3 - 1.0)	mg/l	N/A	MRDL = 4	Water additive used to control microbes.
Inorganic Contaminants							
Barium	No	4/4/22	95	ug/l	2,000	MCL = 2,000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	No	2023 Daily	0.2 - 1.3	mg/l	N/A	MCL = 2.2	Water additive that promotes strong teeth.
Copper ¹	No	9/15/21	715 (78 - 841)	ug/l	1,300	AL = 1,300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead ²	No	9/15/21	1.7 (ND - 1.9)	ug/l	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits.
Nitrate	No	12/14/23	2.69	mg/l	10	MCL = 10	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Sodium	No	10/20/22	33.5	mg/l	N/A	See Notes ³	Naturally occurring; road salt; water softeners; animal waste.
Disinfection By-products							
Total Trihalomethanes	No	8/4/20	6.25	ug/l	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Radioactive Contaminants							
Gross Alpha	No	7/6/22	1.3	PCi/L	0	MCL = 15	Erosion of natural deposits.

Notes:

- 1 – The level presented represents the 90th percentile of the 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, five samples were collected at your water system and the 90th percentile value was the average of the two highest samples, 715 ug/l. The action level for copper was not exceeded at any of the sites tested.
- 2 – The 90th percentile level for lead was 1.7 ug/l. None of the sites exceeded the action level.
- 3 – Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets.

Definitions:

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.

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.

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

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

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. Regardless, we are required to provide 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. The Village of Arcade 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 take 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, please contact the Village Office at 585-492-1111. 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?

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. During 2023, we failed to collect our disinfection byproducts (DBPs) in the month of August as required. However, be advised that the samples collected in 2022 were well below the maximum level allowed. We will correct the violation by monitoring for DBPs in August 2024.

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 (800-426-4791).

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly

controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/l. None of the monitoring results showed fluoride levels that approach the 2.2 mg/l MCL for fluoride.

WHY SAVING WATER IS IMPORTANT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of 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; and
- ♦ Saving water lessens the strain on the water system during a dry spell or droughts and helps to avoid severe 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. So get a run for your money and load it to capacity.
- ♦ Turn off the tap when brushing your teeth.
- ♦ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 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 for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these, otherwise invisible, toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ♦ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

CLOSING

We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. If you see any suspicious activity, please report it immediately to the Village Office at 585-492-1111. Also, please call our office if you have questions.