

Annual Drinking Water Quality Report for 2022
Cincinnatus Water Department
2617 Lower Cincinnatus Road
Cincinnatus, NY 13040
Public Water Supply ID# NY1101753

INTRODUCTION

To comply with State and Federal regulations, Cincinnatus Water Department, 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, your tap water met all State drinking water health standards. We are proud to report that our system has never violated a maximum contaminant level or any other water quality statement. 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 Tyler Mudge, operator at 607-745-4213. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held the second Tuesday of each month at 7:30 P.M. at the Town Hall.

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 naturally-occurring minerals and picks up substances resulting from the presence of animal 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's and the FDA's regulations establish limits in bottled water which must provide the same protection for the public health.

Our water source is from three wells pumping water from the Otselic Valley Aquifer. Two wells are located on Route 26 and one on Lower Cincinnatus Road. The water is disinfected with a sodium hypochlorite solution as it is being pumped into the distribution system. Our system serves approximately 900 people through 266 service connections.

SOURCE WATER ASSESSMENT

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state 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 be contaminated. See section "Are there 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 in the future.

EVALUATION OF SIGNIFICANT POTENTIAL SOURCES OF CONTAMINATION

As mentioned before, our water is derived from three drilled wells. The source water assessment has rated these wells as having a medium to medium-high susceptibility to enteric viruses and nitrates. These ratings are due primarily to the close proximity to the wells and assessment area of properties with septic systems, low intensity residential development, and significant fertilizer use/storage. In addition, the wells draw from a confined aquifer with estimated recharge area within the selected time of travel. While the source water assessment rates our wells as being susceptible to enteric viruses, please note that our water is disinfected to insure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

SOURCE WATER PROTECTION EFFORTS

The Town of Cincinnatus has a wellhead protection district for its public water supply wells. This district provides land use restrictions for certain developments within two protection zones. The specifics of the district may be reviewed at the Town of Cincinnatus water department office or the Cortland County Health Department. A copy of the source water assessment can be obtained by contacting the Cortland County Health Department.

ARE THERE 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, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, synthetic organic compounds which includes perfluorooctanesulfonic acids. The tables presented on the next page 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 does 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 Cortland County Health Department at (607) 753-5035.

INFORMATION ON RADON

Radon is a naturally occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes.

In 2006, we collected a sample from each well that was analyzed for radon. The result were well #1 809.8 picocuries/liter (pCi/l), well #3 285.2 picocuries/liter (pCi/l) and well # 4 211.7 picocuries/liter (pCi/l) For additional Information call your state radon program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-Radon).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations, but we have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

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 September of 2022, we did not monitor for repeat Total Coliform samples due to a positive Total Coliform sample for the purpose of determining compliance with the maximum contaminant level as required. This is a violation of the State Sanitary Code, and therefore cannot be sure of the quality of your drinking water during that time.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general public. 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 Water Hotline (800-426-4791).

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contamination
Arsenic	No	11/9/22	2.8	ug/l	10	n/a	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	No	11/9/22	62.4 ¹ 14.3 ²	ug/l	2000	2000	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper	No	9/21	74.8 ³ (14.5-94.4)	ug/l	1300	AL - 1300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead	No	9/21	1.10 ³ (ND-1.60)	ug/l	0	AL - 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Nitrate	No	5/26/22	3.07 ¹ 3.05 ²	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits
Chloride	No	'22 Ann. Average	64.7 ¹ (33.0-96.4) 103.5 ² (101-106)	mg/l	N/A	250	No health effects. The MCL for chloride is the level above which the taste of water may become objectionable.
Sodium	No	'22 Ann. Average	27.85 ¹ (12.4-43.3) 51.7 ² (51.4-52)	mg/l	N/A	See Note 4	Naturally occurring; Road salt; Water softeners; Animal waste.
Manganese	No	12/25/22	22.8 ¹ ND ²	ug/l	N/A	300	Naturally occurring; indicative of landfill contamination
Sulfate	No	12/25/22	10.8 ¹ 17.3 ²	mg/l	N/A	250	Naturally occurring
Zinc	No	12/25/22	18.7 ¹ 13.5 ²	ug/l	N/A	5000	Naturally occurring; Mining waste.
Total Trihalomethanes (TTHMs - chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	No	'22 Ann. Average	0.49 (8.55-0.73)	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Gross alpha activity (including radium - 226 but excluding radon and uranium)	No	9/27/19	0.35 ¹ 1.21 ²	pCi/l	0	15	Erosion of natural deposits.
Combined radium - 226 and 228	No	9/27/19	0.677 ¹ 0.941 ²	pCi/l	0	5	Erosion of natural deposits.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contamination
Beta particle and photon activity from manmade radionuclides	No	9/27/19	1.67 ¹ 2.46 ²	pCi/l	N/A	50 ³	Decay of natural deposits and man-made emissions

Notes: 1 - Well No. 3

2 - Well No. 4

3 - 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 68.4 ug/l for copper and second highest value 1.71 ug/l for lead. The action level for copper and lead was not exceeded at any of the sites tested.

4 - Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

5 - The State considers 50 pCi/l to be the level of concern for beta particles.

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 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.

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

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

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 - ppt).

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

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 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 drought, helping to avoid severe water use restrictions so that essential fire fighting 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 up 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

Thank you for allowing us to continue to provide your family with quality drinking water this year. 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. Please call our office if you have any questions.