

Annual Drinking Water Quality Report for 2022
Village of Port Byron
52 Utica Street Port Byron, New York 13140
(Public Water Supply ID# 0501722)

INTRODUCTION

To comply with State regulations, the Village of Port Byron 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 water was tested for over 80 contaminants. We only found 1 of those contaminants at a level higher than the State allows. As we told you at that time, our water temporarily exceeded the drinking water standard, and we rectified the problem by flushing our water mains and turning on the aerator in our water storage tank in order to bring in fresh water.

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 Stephen Applebee, Superintendent of Public Works, 315-776-5704. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the 2nd Monday (except for October, that will be the 3rd Monday) of each month at 7:00 p.m. at the Village Municipal Building, located at 52 Utica St, Port Byron, New York. A copy of this annual report may also be viewed at our website: <https://www.cayugacounty.us/802/Port-Byron-Village>.

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, 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 number of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The City of Auburn's water source is Owasco Lake, a surface water source. The Village of Port Byron buys its water from the Cayuga County Water and Sewer Authority, who in turn is supplied by the City of Auburn. The City of Auburn owns and operates two Water Filtration Plants, a Rapid Sand Filtration Plant and a Slow Sand Filtration Plant; both are located at the corner of Swift Street and Pulsifer Drive in the City of Auburn. All water is pre-treated with poly-aluminum chloride to facilitate coagulation and sedimentation prior to filtration. After filtration the water is disinfected by injection of sodium hypochlorite solution before introduction to the distribution system. The finished water is pumped through the City of Auburn distribution system and then flows to the Village of Port Byron through a 12" ductile iron main where it is connected to the Village's distribution system at the corner of South Street and Tex Pultz Parkway. The Cayuga County Water Authority

injects a solution of sodium hypochlorite at the city line to maintain chlorine residual through the system. The Village of Port Byron also injects sodium hypochlorite at its control building located at 1 Crawford Drive Port Byron, NY. We currently serve approximately 1300 village residents through 538 connections. The water storage tank on Orchard Street maintains a capacity of 546,000 gallons.

Owasco lake is classified as a Class-AA Special water body designated by the New York state Department of Environmental Conservation (NYSDEC) as listed in 6 NYCRR Part 702. It is considered an excellent source of potable water and must be protected.

In order to ensure that the tap water is safe to drink the NYSDOH prescribes regulations that limit the number of certain contaminants in water provided by public water systems. The City treats its water according to EPA’s and the NYSDOH’s regulations. The United States Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The City of Auburn has a program of Watershed Protection to enforce regulations, promulgated by law under NYCRR Section 1100 (Public Health).

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, lead and copper, asbestos, total trihalomethanes, haloacetic acids, 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 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 Cayuga County Health Department at 315 253-1405.

Table of Detected Contaminants

CONTAMINANT	VIOLATION YES/NO	DATE OF SAMPLE	LEVEL DETECTED (AVE RANGE)	UNIT MEASUREMENT	MCL G	REGULATORY LIMIT (MCL,TT OR AL)	LIKELY SOURCE OF CONTAMINATION
Lead ¹	No	08/2021	6.2 Range ND-110	PPB	0	AL = 15	Contained in Finished water, an artifact of old piping and lead soldered joints
Copper ²	No	08/2021	0.060 Range 0.013- 0.072	ppm	1.3	AL-1.3	Contained in finished water, an artifact of old piping and lead soldered joints

Trihalomethanes, Total, TTHM	Yes	2/7/22 5/10/22 8/9/22 11/8/22	Highest Average 81.4575 ³ Range 36.1-100.7	ppb	N/A	80 MCL	Contained in Chlorinated Water
Haloacetic Acids, HAA5	No	2/7/22, 5/10/22 8/9/22 11/8/22	Highest Average 27.2 ³ Range 13.9-32.0	ppb	N/A	60 MCL	Contained in Chlorinated Water

Notes:

1 – The level presented represents the 90th percentile of the 10 samples collected. In this case, 10 samples were collected at your water system and the 90th percentile value was the ninth highest value, <1 ppb, also known as “not detected”. The action level for lead was not exceeded at any of the sites tested.

2 – 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 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, 10 samples were collected at your water system and the 90th percentile value was the ninth highest value, 0.046 mg/l. The action level for copper was not exceeded at any of the test sites. The action level for copper was not exceeded at any of the sites tested.

3 – This number represents the Highest Locational Running Annual Average (LRAA) for 2022.

The Village of Port Byron also sampled the following items: total coliform. None of those contaminants were detected in the drinking water in 2022.

Table of Detected Contaminants from Auburn’s Annual Water Quality Report

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. None of the compounds we analyzed were detected in your drinking water.

CONTAMINANT	VIOLATION YES/NO	DATE OF SAMPLE	LEVEL DETECTED (AVE RANGE)	UNIT MEASUREMENT	MCL G	REGULATORY LIMIT (MCL,TT OR AL)	LIKELY SOURCE OF CONTAMINATION
PHYSICAL Turbidity	No	5 days per week	0.15 Avg range 0.03-2.05	NTU	N/A	5.0 distribution system	Soil runoff/Natural lake turnover
PHYSICAL Turbidity	No	7 days per week	0.052 Avg range 0.01-0.3	NTU	N/A	0.3-1.0 MCL filter performance	Soil runoff/Natural lake turnover
INORGANICS							

Barium	No	4/13/22	0.023	ppm	2	2	Erosion of natural deposits
Cyanide	No	2/20/19	0.013	Ppm	N/A	0.2	Erosion of natural deposits
Nickel	No	4/13/22	0.00019	ppm	N/A	0.1	Erosion of natural deposits
Sodium	No	8/17/22	19	ppm	N/A	No limit	Naturally Occurring
Sulfate	No	3/23/20	12	ppm	N/A	250	Naturally occurring
Nitrate	No	2/16/22 5/18/22 8/17/22 11/16/22	1.04 Avg. Range 0.85-1.2	PPM	10	10.0 MCL	Erosion of natural deposits
ORGANICS Trihalomethanes, Total	No	2/16/22 5/18/22 8/17/22 11/16/22	LRAA 60.23 Range 32.49-62.6	ppb	N/A	80 MCL	Contained in Chlorinated Water
Haloacetic Acids, HAA5	No	2/16/22 5/18/22 8/17/22 11/16/22	LRAA 30.3 Avg. Range 5.9-37.0	ppb	N/A	60 MCL	Contained in Chlorinated Water
Lead ¹	No	June 2020 July 2020	1.4 Range ND-5.2	PPB	0	AL = 15	Contained in Finished water, an artifact of old piping and lead soldered joints
Copper ²	No	June 2020 and July 2020	0.045 Range 0.0013- 0.15	ppm	1.3	AL-1.3	Contained in finished water, an artifact of old piping and lead soldered joints
Radioactive Contaminants							
Gross Alpha	No	04/26/21	ND	PCi/L	0	15 PCi/L	Contained in soil or sedimentary rock formations
Unregulated Contaminants							
Bromide	No	7/2/18 10/2/18	15 15	ppb	N/A	N/A	Naturally occurring
TOC	No	1/15/20 2/19/20	1.4 1.4	ppm	N/A	N/A	Erosion of natural deposits

Manganese	No	7/2/18 10/2/18	0.86 1.7	ppb	N/A	N/A	Naturally occurring
Haloacetic Acids, (HAA9)	No	7/05/18 10/02/18	4.9	ppb	N/A	N/A	Contained in Chlorinated Water.
Haloacetic Acids, (HAA6Br)	No	7/05/18	4.9	ppb	N/A	N/A	Contained in Chlorinated Water.
1,4-Dioxane	No	9/14/22	0.0204	ppb	N/A	N/A	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Cyanotoxin							
Microcystin Finished water	No	8/17/22 – 11/14/22 21 Samples	All < 0.15	ppb	0	N/A ³	Naturally occurring due to harmful algae blooms/cyanobacteria
Microcystin Raw water	N/A	8/17/22 – 11/14/22 21 Samples	Range < 0.15-17.0	ppb	N/A	N/A	Naturally occurring due to algae blooms/cyanobacteria

Notes:

*1 – The level presented represents the 90th percentile of the 33 samples collected. In this case, 33 samples were collected at your water system and the 90th percentile value was the twenty-seventh highest value, 1.4 ppb. The action level for lead was not exceeded at any one of the 30 sites.

*2 – The level presented represents the 90th percentile if the 33 sites tested. A percentile is a value on a scale of 100 that indicates the percent of 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, 33

samples were collected at your water system and the 90th percentile value was the twenty-seventh highest value, 0.045 mg/l. The action level for copper was not exceeded at any of the sites tested.

*3 – The United States Environmental Protection Agency 10-day health advisory level for microcystin is 0.3 ppb for children less than or equal to 5 years of age and vulnerable populations; and 1.6 for all other people.

*4 – This number represents the Highest Locational Running Annual Average (LRAA) for 2022.

*5 – Exceeded (81ppb) LRAA last quarter result.

*6 - Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on (give date) (0.9 NTU). State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Although (given date) was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

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 contamination.

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.

Level 1 Assessment: A Level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

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

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 to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

WHAT DOES THIS INFORMATION MEAN?

The table shows that our system uncovered some problems this year. We violated the maximum contaminant level of 80 ppb for total trihalomethanes in the third quarter of 2022. The potential adverse health effects are that some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. We have corrected this by flushing our water mains and turning on the aerator in our water storage tank in order to bring in fresh water.

We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

We are required to present the following information on lead in the 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 Port Byron 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 Stephen Applebee, Superintendent of Public Works, 315-776-5704. 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?

During 2022, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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).

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 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.

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 call our office if you have questions.

Additional Sources of Information

Seth Jensen
Protection Agency
Director of Municipal Utilities
(315) 255-4180
sjensen@auburnny.gov

United States Environmental
Safe Drinking Water Hotline
1-800-426-4791

Cayuga County Health Department
Kathleen Cuddy, Public Health Director
(315) 253-1560

Eileen O'Connor
Director of Environmental Health
(315) 253-1405