

**Annual Drinking Water Quality Report for 2018**  
**Village of Port Byron**  
**52 Utica Street, Port Byron, New York 13140**  
**Public Water Supply ID# 0501722**

**INTRODUCTION**

To comply with State and Federal 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 tap water met all State drinking water health standards. In 2018, the City of Auburn water filtration plant conducted testing for over 100 contaminants. Testing resulted in the detection of several contaminants, however, none of the contaminants were found at a level above the threshold set forth by the New York State Department of Health. 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 Mr. Steven E. Sims, Superintendent of Public Works, at (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 second and fourth Monday of each month at 7:00 PM at the Municipal Building, 52 Utica Street, Port Byron, New York.

**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 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 Environmental Protection Agency (EPA) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The New York State Department of Health's (NYSDOH) and the United States Food and Drug Administration's (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is surface water drawn from Owasco Lake. 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 solution at the City line to maintain chlorine residual through the system. We currently serve approximately 1300 village residents through 538 connections. The water storage tank on Orchard Street maintains a capacity of 546,000 gallons.

**ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

The City of Auburn routinely monitors for contaminants in your drinking water according to State and Federal laws. In addition, Port Byron tests your drinking water monthly for total coliform bacteria and monitors for lead and copper as required by regulation. As the State regulations require, the City of Auburn

routinely tests drinking water for numerous contaminants. These contaminants include coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows the City 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, is more than one year old.

### SUMMARY OF DETECTED CONTAMINANTS

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain 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 may be obtained by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791 or the Cayuga County Health Department at 315-253-1405.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measurement	MCIG	Regulatory Limit (MCL, IT or AD)	Likely Source of Contamination
PHYSICAL Turbidity <sup>1</sup>	No	5 days per week	0.013 Avg Range 0.05 – 4.65	NTU	N/A	5.0 distribution System	Soil Runoff
PHYSICAL Turbidity	No	7 days per week	0.04 Avg Range 0.01 – 0.37	NTU	N/A	0.3 – 1.0 MCL Filter Performance	Soil Runoff
Total Coliform	No	2 per month	All < 1	CFU/100mL	0	>5% Samples 1	Naturally Present Environment
E. Coli	No	N/A	N/A	CFU/100mL	N/A	1 or more positive samples	Human and Fecal Animal Waste
<b>INORGANICS</b>			<b>INORGANICS</b>				
Barium	No	4/17/18	0.021	PPM	2	2	Erosion of natural deposits
Chloride	No	3/23/17	24	PPM	N/A	250	Naturally Occuring
Chromium	No	4/17/18	0.0013	PPM	N/A	0.1	Erosion of natural deposits
Cyanide	No	3/23/17	0.0052	PPM	0.2	0.2	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Nickel	No	4/17/18	0.0010	PPM	N/A	0.1	Erosion of natural deposits
Sulfate	No	3/23/17	12	PPM	N/A	250	Naturally Occuring
Sodium	No	3/23/17	15	PPM	N/A	No Limit	Naturally Occuring

Nitrate	No	2/14/18 5/16/18 8/16/18 11/15/18	0.97 Avg Range 0.81 – 1.1	PPM	10	10.0 MCL	Erosion of natural deposits
<b>ORGANICS</b> Trihalomethanes, Total	No	2/16/18 5/8/18 8/14/18 11/13/18	61.7 Avg Range 49.7-75.4	PPB	N/A	80 MCL	Contained in Chlorinated Water
Haloacetic Acids (HAA5)	No	2/13/18 5/8/18 8/14/18 11/13/18	30.5 Avg Range 26.0-33.0	PPB	N/A	60	Contained in Chlorinated Water
Lead	No	8/2018	1.1 Range N/D- 2.3	Mg/L	0	15 <b>3</b>	Contained in Finished Water, an artifact of old piping and lead soldered joints.
Copper	No	8/2018	0.051 Range 0.015-0.058	Mg/L	1.3	1.3 <b>2</b>	Contained in Finished Water, an artifact of old piping and lead soldered joints.
<b>Radiative Contaminants</b>							
Gross Alpha	No	4/16/15	7.15	PCi/L	0	15 PCi/L	Contained in soil or sedimentary rock formations
Gross Beta	No	4/16/15	ND	PCi/L	0	4 PCi/L	Contained in soil or sedimentary rock formations
Combined Radium 226 228	No	4/16/15	ND	PCi/L	0	5 PCi/L	Contained in soil or sedimentary rock formations
<b>Unregulated Contaminants</b>							
Chromium	No	3/18/15 6/18/15	0.29,0.29 0.095,0.17	ppb	N/A	N/A	Naturally occurring element; used in making steel and other alloys;chromium - 3or-6 forms are used for chrome plating dyes and pigments, leather tanning and wood preservation
Strontium	No	3/18/15 6/18/15 12/17/15	84.1, 86.6 81.9, 80.5 85.5,82.3	ppb	N/A	N/A	Naturally occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode ray tube

							televisions to block x-ray emissions
Hexavalent Chromium	No	3/18/15 6/18/15 12/17/15	0.033 0.048, 0.030 0.043, 0.031	ppb	N/A	N/A	Naturally occurring element; used in making steel and other alloys; chromium - 3or-6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Vanadium	No	6/18/15	0.12, 0.11	ppb	N/A	N/A	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst
Chlorate	No	12/17/15	180, 160	ppb	N/A	N/A	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide
Bromide	No	7/02/18 10/02/18	15 15	ppb	N/A	N/A	Naturally occurring
TOC	No	7/02/18 10/02/18	3.88 4.63	ppm	N/A	N/A	Erosion of natural deposits.
Manganese	No	7/02/18 10/02/18	0.86 1.7	ppb	N/A	N/A	Naturally occurring
Haloacetic Acids, (HAA9)	No	7/05/18 10/02/18	33.2 19.3	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.
<b>Cyanosin</b>							
Microcystin Finished Water	No	8/14/18- 11/8/18	All <0.3	ppb	0	N/A <sup>4</sup>	Naturally occurring due to algae blooms
Microcystin Raw Water	N/A	8/14/18- 11/8/18 30 samples	Range <0.3- 1.2	ppb	N/A	N/A	Naturally occurring due to algae blooms

## NOTES

- 1 - Positive Total Coliform samples triggered a Level 1 Assessment for the City of Auburn.
- 2 - The level presented represents the 90<sup>th</sup> percentile of the 11 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 11 samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest (0.051 mg/l). The action level for copper was not exceeded at any of the sites tested.
- 3 - The level presented represents the 90<sup>th</sup> percentile of the 11 samples collected. The action level for lead was not exceeded at any of the 11 sites.

4- 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 ppb for all other people.

## **LEAD AND COPPER SUMMARY**

Over the years, the village has conducted surveillance for lead and copper in the water system. Theoretically it is possible to leach the metal lead and copper from household structures with copper pipes and lead solder installed prior to 1982. The most recent round of testing conducted in 2018 revealed the data as indicated under **Table of Detected Contaminants**.

### **Definitions**

**Level 1 Assessment:** A level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in their water system.

**Level 2 Assessment:** A level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. Coli violation has occurred and/or why total coliform bacteria have been found in their water system on multiple occasions.

**Maximum Residual Disinfection Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfection Level Goal-** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL 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.

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

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

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

**Color:** the presence of dissolved substance in water.

**Organic chemicals:** a term used to refer to chemical compounds from carbon molecules. These compounds may be natural materials (such as animal and plant sources) or manmade materials (such as synthetic organics).

**Inorganic chemicals:** materials such as sand, salt, iron, calcium salts and other mineral materials of mineral origin.

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

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

**mcg/L:** micrograms per liter - one microgram of a substance dissolved in each liter of water. This unit is equal to one part-per-billion, or ppb.

**mg/L:** milligram per liter - a measure of concentration of a dissolved substance. A concentration of one mg/L means that one milligram of a substance is dissolved in each liter of water. For practical purposes, this unit is equal to 1 part-per-million, or ppm.

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

### **WHAT DOES THIS INFORMATION MEAN?**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials in your home's plumbing. The Village of Port Byron is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water

had been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available for the Safe Drinking Water Hotline (1-880-426-4791) or at <http://www.epa.gov/safewater/lead>.

Turbidity is a measure of the cloudiness of water. The City of Auburn monitors it because it is a good indicator of the effectiveness of their filtration system. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for micro-biological growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Please pay special attention to the additional statement in this document regarding Cryptosporidium and Giardia. As you can see by the table, our system had no violations.

### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2018, our system was in compliance with all applicable State and Federal drinking water requirements.

### **INFORMATION ON CRYPTOSPORIDIUM & GIARDIA**

New York State law requires water suppliers to notify their customers about the risks of cryptosporidiosis and giardiasis. Cryptosporidiosis and giardiasis are intestinal illnesses caused by microscopic parasites. Cryptosporidiosis can be very serious for people with weak immune systems, those on chemotherapy, dialysis or transplant patients, as well as people with Crohn's disease or HIV infection. People with weakened immune systems should discuss with their health care providers the need to take extra precautions such as boiling water, using certified bottled water or a specially approved home filter. Individuals who think they may have cryptosporidiosis or giardiasis should contact their health care provider immediately. For additional information on cryptosporidiosis or giardiasis, please contact the Cayuga County Health Department at (315) 253-1405.

The city began a two (2) year testing program for cryptosporidium and giardia in October 2016. Samples of the raw water were collected once a month during this two (2) year period. Of the twenty-four (24) samples collected during this period, one (1) sample in April of 2019 tested positive for Giardia. The rest of the samples collected in 2018 in 2018 were negative for cryptosporidium and giardia.

### **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)

### **INFORMATION ON RADIOLOGICAL TESTING**

Radiological Testing was performed in 2015. Testing was below limits. Testing will be due again in 2024.

### **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.

### **How can YOU conserve water?**

- 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.
- Check your toilet 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.
- 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.

### **System Improvements**

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The water project is substantially complete at this time. The cost of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

### **A NOTE FROM THE NYS DEPARTMENT OF HEALTH**

The NYS Department of Health has completed a source water assessment for the City of Auburn, based on available information. Possible and actual threats to this drinking water source were evaluated. This 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 lakes. 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. (See the section of this document "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected in the drinking water.) The source water assessments are intended to provide managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived primarily from Owasco Lake. The source water assessment has rated this source as having an elevated susceptibility to protozoa and phosphorus due to the amount of agriculture lands in the area and the quality of wastewater discharge from municipal wastewater treatment plants to surface water. In addition, this source water assessment rated Owasco Lake as having an elevated susceptibility to pesticide contamination due to the amount of agriculture lands.

County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the complete assessment is available for review by calling the Cayuga County Health Department at 253-1405.

### **ADDITIONAL SOURCES OF INFORMATION**

City of Auburn Dept. of municipal Utilities  
Agency  
John West, Chief Water Plant Operator  
4791

United States Environmental Protection  
Agency  
Safe Drinking Water hotline, 1-800-462-  
4791

Cayuga County Health Department  
Kathleen Cuddy, Public Health Director 253-1560  
Eileen O'Connor, Director of Environmental Health 253-

1405

**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 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, our way of life and our children's.

It's up to us to protect our Water Supply

