

Annual Drinking Water Quality Report for 2016
Village of Brocton
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Brocton, NY 14716
Phone (716)792-4169
(Public Water Supply ID# NY0600353)

INTRODUCTION

To comply with State regulations the Village of Brocton 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 did not violate a maximum contaminant level or any other water quality standard. However, our contracted laboratory failed to analyze our water for the complete set of synthetic organic contaminants during 2016 and therefore we cannot be sure of the quality of the water for the contaminants not analyzed. We will be re-sampling our water for the complete set of synthetic organic contaminants in 2017 and it should be noted that there were no detections of the contaminants in the partial sample.

This report provides an overview of all 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 Greg Borst, Chief Operator, at 792-9933. James Horlacher, E. Mark Snyder, are also licensed operators that assist with the operation of the plant. 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 first and third Wednesdays of each month, @ 7:00pm at the Village Hall. The phone number of the Village Clerk's Office is 792-4169.

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 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 system serves approximately 2000 people through 690 residential, and 18 commercial service connections and bulk sale connections with the Town of Portland and the Department of Corrections. Our water source is a surface water reservoir whose main source of water is Slippery Rock Creek. We produce an average of 300,000 gallons of water each day. The water is filtered to remove sediment and other contaminants, and then disinfected prior to distribution for added safety.

The New York State Department of Health has evaluated this water supplies susceptibility to contamination under the Source Water Assessment Program (SWAP). Their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. It does not indicate that any contamination has or will occur. This water supply provides treatment and regular monitoring to ensure that the water that is delivered to consumers meets all applicable standards. This assessment found an elevated susceptibility to contamination for both the Burr and Slippery Rock Reservoirs. The amount of pasture in the assessment area results in a high potential for protozoa contamination. There is also a high density of sanitary wastewater discharges in the Slippery Rock watershed, which results in elevated susceptibility for nearly all contaminant categories. However, the total amount of wastewater discharged to surface water in either reservoir area is not high enough to considerably raise the potential for contamination. There are no noteworthy contamination threats associated with other

discrete contaminant sources. Finally, it should be noted that the hydrologic characteristics (e.g. basin shape & flushing rates) generally make reservoirs highly sensitive to existing and new sources for phosphorus and microbial contamination.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: Halo acetic acids, total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds including pesticides and herbicides. 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 Chautauqua County Health Department at 716-753-4481.

Table of Detected Contaminants

Contaminant	Violation	Date of Sample	Level Detected	Unit Measure -ment	Regulatory Limit (MCL/AL)	MCLG	Likely Source of Contamination
MICROBIOLOGICAL CONTAMINANTS							
Turbidity(1)	No	3/18/16	0.53 NTU	NTU	TT=<1.0 NTU	N/A	Soil Run-off
Turbidity(1)	No	January (2016)	100% <0.3	NTU	TT=95% of samples <0.3NTU	N/A	Soil Run-off
Distribution Turbidity(1)	No	January & September (2016)	0.14	NTU	MCL>5 NTU	N/A	Soil Run-off
INORGANIC CONTAMINANTS							
Lead (2)	No	6/18/14	4.00; Range ND-9.00	ug/l	15 (AL)	0	Corrosion of household plumbing systems; Erosion of natural Deposits
Copper (3)	No	6/18/14	0.105; Range 0.017-0.251	mg/l	1.3(AL)	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Barium	No	2/17/16	0.0386	mg/l	2.0 (MCL)	2	Discharge of drilling wastes; discharge from metal refineries; erosion or natural deposits
Nitrate	No	2/17/16	0.36	mg/l	10 (MCL)	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Fluoride	No	2/16/17	0.02	mg/l	2.2 (MCL)	N/A	Erosion of natural deposits; water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Cadmium	No	2/16/17	0.16	ug/L	5 (MCL)	5	Corrosion of galvanized piper; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints.
Chromium	No	2/16/17	0.98	ug/l	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	No	2/16/17	16.0	ug/l	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
RADIOLOGICAL CONTAMINANTS							
Gross Beta(4)	No	8/9/16	1.13	pCi/l	50 (MCL)	0	Decay of natural deposits and man-made emissions.
STAGE 2 DISINFECTION BYPRODUCTS (SEWER PLANT)							
Haloacetic Acids	No	Quarterly	Avg.=16.5	ug/l	60(MCL)	N/A	By-products of drinking water chlorination.

		(2016)	Range= 10.48-25.6				
Trihalomethanes	No	Quarterly (2015)	Avg.=40.21 Range= 15.4-58.02	ug/l	80(MCL)	N/A	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.

STAGE 2 DISINFECTION BYPRODUCTS (BLOOD STREET)

Haloacetic Acids	No	Quarterly (2015)	Avg.=15.34 Range= 11.3-19.5	ug/l	60(MCL)	N/A	By-products of drinking water chlorination.
Trihalomethanes	No	Quarterly (2015)	Avg.=35.23 Range= 17.5-49.2	ug/l	80(MCL)	N/A	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.

DISINFECTANT

Chlorine residual	No	Daily (2016)	Ave.=1.17 Range= 0.6-1.52	mg/l	4.0(MCL)	N/A	Water additive used to control microbes.
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Notes:

1 - Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 3/18/16(0.53 NTU). State regulations require that turbidity must always be less than or equal to 1.0 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Although January 2016 was the month when we had the highest turbidity measurements, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation. Distribution Turbidity is a measure of the cloudiness of the water found in the distribution system. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Our highest average monthly distribution turbidity measurement detected during the year (0.14 NTU) occurred in January and September 2016. This value is below the State's maximum contaminant level (5 NTU).

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 a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the Lead values detected at your water system. In this case 10 samples were collected at your water systems and the 90th percentile value was 4.0 ug/l. The action level for Lead was not exceeded at any of the sites tested.

3-The level presented represents the 90th percentile of the 10 samples collected. The 90th percentile value for Copper was 0.105 mg/l. The action level for Copper was not exceeded at any of the sites tested.

4- The NYSDOH 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 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.

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).

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 the level allowed by the State. Lead and copper were detected within the system but of 10 samples collected none were found exceeding the action levels. We are however required to present the following information on Lead in drinking water:

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 used in your home's plumbing. The Village of Brocton is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has 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 from **the Safe Drinking Water Hotline (1-800-426-4791)** or at <http://www.epa.gov/safewater/lead>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2016, our system was in compliance with applicable State drinking water operating and reporting requirements but we had a minor violation with monitoring. As stated in the introduction, our contracted laboratory failed to analyze our water for the complete set of synthetic organic contaminants during 2016. Only a small portion of the complete set was analyzed. Of those contaminants analyzed, there were no detections. The complete set of synthetic organic contaminants will be analyzed in the 2017 calendar year.

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 FOR NON-ENGLISH SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

French

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

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.

CLOSING

The Brocton Water Treatment Facility now services the Village of Brocton, Lakeview Shock incarceration Prison and several water districts for the Town of Portland.

The Village of Brocton is now committed to the regional water system and we are moving steadfastly toward the completion of the transition of the envisioned system. It is anticipated we will switch to the regional system in the coming year.