Brockport Board of Trustees
49 State Street
Brockport, NY 14420

Annual Drinking Water Quality Report for 2015

Brockport Water System

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Brockport, NY 14420

Public Water Supply
ID#270103

INTRODUCTION

To comply with State regulations, Village of Brockport, 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. 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 Mayor Margaret B Blackman, at (585) 637-1044 or Superintendent of Public Works, Harry Donahue at (585) 637-1060. 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 in the Village Hall, 49 State Street, on the first and third Monday of every month at 7:00 pm.

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 source is Lake Ontario. It is filtered and disinfected by the Monroe County Water Authority (MCWA) in their Shoremont Treatment Plant, which is located in the town of Greece. During 2015, our system did not experience any restriction of our water source. The water goes through a treatment process that consists of coagulation, filtration and disinfection prior to distribution. Fluoride is also added to the water to help prevent tooth decay. The New York State Department of Health has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP). In general, the Lake Ontario source used by MCWA is not very susceptible because of the size and quality of the Great Lakes. Because storm and wastewater contamination are potential threats to any source water, the water provided to our customers undergoes rigorous treatment and testing prior to its delivery.

For more information on the State's source water assessment and how you can protect your water, you can contact us at (585) 637-1060.

FACTS AND FIGURES

Our water system serves 8,366 residents through 1,740 residential metered connections. We also provide water to the faculty and students of both the Brockport Central School District and the State University College at Brockport.

In 2015, the Brockport Water Department purchased 257 million gallons of water from the MCWA. Of the amount purchased, 209 million gallons were delivered to our metered and bulk water customers. The difference between the amount purchased from the MCWA and the amount delivered to our metered customers and bulk customers is 48 million gallons or 19% was used for Village operations, water main flushing, firefighting and leakage. In 2015, Brockport water customers within the Village limits were charged $4.66 per 1,000 gallons of water and Brockport water customers outside the Village limits (out of district users) were charged $5.99 per 1,000 gallons. The annual average water bill per household for a family of 5 is $279.60.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. A listing of the testing is presented on TABLE 1. 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 Monroe County Department of Public Health at (585) 753-5057.

In addition to the testing done at the plants by the MCWA, the Brockport Water System also tests the distribution system for Chlorine residual, Turbidity and Total Coliform. Of the 384 distribution samples taken by us in 2015, all of them met the EPA standards for drinking water as shown on Table 1 below.

TABLE 1 Village of Brockport 2015	Cl2 mg/L	Tu NTUs	Highest Coliform Positive month
Ave	0.5	0.9	None Detected in 2015
Min	0.05	0.03	
Max	1.1	0.40	
#of samples	384	384	

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 well below the level allowed by the State.

We are 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 woman, 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. Village of Brockport 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?

Monitoring Requirements Met for Brockport Water System

During 2015, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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 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 New York water utilities providing drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the U.S. Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal level of 0.7 mg/L. To ensure optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. In 2015 the fluoride levels in your water were within 0.2 mg/L of the CDC's recommended optimal level 97% of the time. The highest monitoring result was 1.5 mg/L, well below the 2.2 mg/L MCL for fluoride.

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.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, and then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

In 2015, The Brockport Water Department continued with our semi-annual fire hydrant flushing program to ensure that our water mains are clean and our hydrants are working effectively and freely. We have continued our leak detection survey semiannually. We repaired 11 water main breaks on 6" to 12" mains. We also replaced 2 service connections with new copper tubing. In some of these cases the homeowner's side was leaking and had to be renewed by the homeowner's plumber as well. During the winter we worked to thaw 2 residential water services that were froze due to freezing temperatures. We have finished changing residential water meters to radio read meters. We also continued converting our Commercial and Industrial meter accounts to radio reads as well. Late in 2015 we received a grant to begin work on the West Avenue water main replacement Phase II. We have begun work on Phase I, which consists of the replacement of approximately 1,400 ft. of 6" cast iron water main with 12" ductile iron water main. Phase II will soon start and continue further west down West Ave to Idlewood Dr.

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. Please call our office if you have questions.

Key Terms Used In Water Quality Table

MCL = Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as possible.

MCLG = Maximum Contaminant Level Goal, the level of a contaminant below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL = Maximum Residual Disinfectant Level, 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.

MRDLG = Maximum Residual Disinfectant Level Goal, 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.

pCi/L = picoCuries per liter

TT = Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.

AL = Action Level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ND = Not Detected, absent or present at less than testing method detection level. All testing methods are EPA approved with detection limits much less than the MCL.

NA = Not applicable

NR = Not Required

NS = No standard

mg/L = milligram (1/1,000 of a gram) per liter = **ppm** = parts per million

ug/l = microgram (1/1,000,000 of a gram) per liter = **ppb** = parts per billion

ng/L = nanogram (1/1,000,000,000 of a gram) per liter = **ppt** = parts per trillion

NTU = Nephelometric Turbidity Unit, a measure of water clarity.

Village of Brockport - Water Quality Table

Detected Substances — **2015 Results Except As Noted**

				Shoremont & Webster WTPs (Lake Ontario)		Meets EPA Standards
Substances	**Units**	**MCLG**	**MCL**	**Range of detected values**	**Likely Source**	
Barium	mg/L	2	2	0.018 - 0.021	Erosion of natural deposits	Yes
Chloride	mg/L	NA	250	25 - 28	Naturally occurring	Yes
Dacthal (DCPA)	ug/L	NA	50	ND-0.13	Herbicide	Yes
Fluoride	mg/L	NA	2.2	0.1 - 1.5	Natural and additive - promotes strong teeth	Yes
Nitrate	mg/L	10	10	0.26 - 0.36	Erosion of natural deposits	Yes
Sodium	mg/L	NA	NS	15 - 17	Naturally occurring	Yes
Sulfate	mg/L	NA	250	28 - 31	Naturally occurring	Yes
Treatment Requirements - 95% of samples each month must be less than 0.3 NTU. Range and lowest monthly percentage are listed. Turbidity is a measure of water clarity and is used to gauge filtration performance.						
Turbidity - Entry Point	NTUs	NA	TT	0.03 - 0.13 100%	Soil Runoff	Yes
Microbial - No more than 5% of monthly samples can be positive. The highest monthly % positive is listed.						
Coliform	% Positive	0	5%	1.1% Sept	Naturally occurring	Yes
Disinfectant and Disinfectant By-products (DBPs) - Chlorine has a MRDL (Maximum Residual Disinfectant Level) and MRDLG (MRDL Goal) rather than an MCL and MCLG (Average and range are listed). For the DBPs (THMs and Haloactic acids) the highest individual location annual average and the range for all locations are listed.						
Chlorine Residual - Entry Point	mg/L	4	4	1.1 (0.6 - 2.2)	Additive for control of microbes	Yes
Total THMs	ug/L	NA	80	40.5 (23-57)	Byproduct of water chlorination	Yes
Haloacetic Acids	ug/L	NA	60	21 (11-32)	Byproduct of water chlorination	Yes
Lead and Copper- 90% of samples must be less than the Action Level (AL). The 90th Percentile, the number of samples exceeding the AL, and the range of results are listed.						
Copper (Customer Tap Samples)	mg/L	1.3	AL=1.3	0.094 (None) 0.005 - 0.500	Corrosion of household plumbing	Yes
Lead (Customer Tap Samples)	ug/L	0	AL=15	12 (Four) ND - 63	Corrosion of household plumbing	Yes

For more information on MCWA's monitoring program call Customer Service at 585-442-7200.

Unregulated Containment Monitoring (UCMR3) - Every few years the USEPA issues a new list of up to 30 unregulated contaminants for which public water systems must monitor. This provides baseline occurrence data that the EPA combines with toxicological research to make decisions about future drinking water regulations. MCWA completed monitoring for the third list (UCMR 3) in 2014. For more information on this process go to http://www.drinktap.org/home/water-information/water-quality/ucmr3.aspx.

Supply (Source)	**Shoremont WTP (Lake Ontario)**	
Substance **Units MCL**	**At Entry Point to System**	**At End of System**
Chromium (total) ug/L 100	ND-0.23 (2014)	ND-0.44 (2014)
Molybdenum ug/L NS	1.2-1.3 (2014)	ND-1.3 (2014)
Strontium ug/L NS	160-190 (2014)	130-210 (2014)
Vanadium ug/L NS	ND-0.2 (2014)	0.24-0.50 (2014)
Chromium-6 ug/L 100	0.074-0.085 (2014)	0.16-0.24 (2014)
Chlorate ug/L NS	ND-130 (2014)	120-350 (2014)

Note: The following contaminants were tested for but not found: 1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2 Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,1-Dichloropropene, EDB, 1,2,3-Trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Butadiene, 1,3,5,-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,3-Dichloropropene(Cis), 1,3-Dichloropropene(Trans), 1,3-dinitrobenzene, 1,4-Dioxane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, Dioxin, 2,4 D, 2-4-5 TP, 2-Chlorotoluene, 3-Hydroxycarbofuran, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, 4-Chlorotoluene, Acetochlor, Aldicarb Sulfone, Aldicarb Sulfoxide, Aldrin, Androstene, Antimony, Arsenic, Atrazine, Benzene, Benzo(a)pyrene, Beryllium,Bromobenzene, Bromochloromethane, Bromomethane, Butachlor, Cadmium, Carbaryl, Carbofuran, Carbon Tetrachloride, Chlordane, Chlorobenzene, Chloroethane, Chlorodifluoromethane, Chloromethane, Cobalt, cis-1,2-Dichloroethene, Cryptosporidium, Cyanide, DCPA, Dalapon, DBCP, Di(2-Ethylhexyl) Adipate, Di(2-Ethylhexyl) Phthalate, Dibromomethane, Dicamba, Dichlorodifluoromethane, Dichloromethane, Dieldrin, Dinoseb, Dioxin, Diquat, Endothall, Endrin, Equilin, Estradiol, Estriol, Estrone, Ethylbenzene, Ethynylestradiol, Giardia, Glyphosate, Gross Alpha, Gross Beta, Heptachlor, Heptachlorepoxide, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Iron, Isophorone, Isopropyl Benzene, Lindane, Mercury, Methomyl, Methoxychlor, Metolachlor, Metribuzin, MTBE, n-Butylbenzene, Nickel, Nitrite, n-Propylbenzene, Oxamyl, Paraquat, PCB's, Pentachlorophenol, Perchlorate, PFBS, PFHpA, PFHxS, PFNA, PFOA, PFOS, Pichloram, p-Isopropyltoluene, Propachlor, sec-Butylbenzene, Selenium, Silver, Simazine, Styrene, Surfactants, tert-Butylbenzene, Testosterone, Tetrachloroethene, Thallium, Toluene, Toxaphene, trans-1,2-Dichloroethene, Trichloroethene, Trichlorofluoromethane, Vinyl Chloride, Xylene, Zinc, Chromium, Dalapon, Manganese, Chloromethane