



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 2018, 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

MCWA 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 2018 the fluoride levels in your water were within 0.2 mg/L of the CDC's recommended optimal level 98% of the time. The highest monitoring result was 1.03 mg/L, 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 several 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 2018, 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 will continue our leak detection survey semiannually. We repaired 6 water main breaks, all on 6" mains. Four needed a stainless-steel band, one had bolts rotted off a tee connection and one needed ss band replaced. We also had 2 service connection leaks, one on our side of the curb stop which we replaced with copper tubing, and the other was a

broken curb key. We finalized the abandonment of the 6" deteriorated main on Clark St. from Graves St. to Idlewood Dr., switching everything over to the 16" main. Idlewood Dr. water main replacement was completed.

For 2019, we only have 1 more large radio read meter to install in a large apartment complex, we will then be completely switched over. We have budgeted for 23 fire hydrants to be replaced during the summer of 2019. The old hydrants do not have the 5-1/4" steamer caps. The new ones will be consistent with all the rest in the Village.

## 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** = picroCuries 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.

## MCWA Water Quality Summary Table

**Detected Substances** **2018 results except as noted**

### Shoremont & Webster WTPs (Lake Ontario Surface Water)

Substances (Provided by the MCWA)	Units	MCLG	MCL	Range of Detected Values	Likely Source	Violation Yes or No
Arsenic	µg/L	0	10	ND - 2.6	Erosion of natural deposits	No
Barium	mg/L	2	2	0.018 - 0.024	Erosion of natural deposits	No
Chloride	mg/L	NA	250	25 - 30	Naturally occurring	No
Fluoride	mg/L	NA	2.2	0.13 - 1.03	Natural and additive - promotes strong teeth	No
Nitrate	mg/L	10	10	0.18 - 0.34	Erosion of natural deposits	No
Sodium	mg/L	NA	NS	13 - 17	Naturally occurring	No
Sulfate	mg/L	NA	250	25 - 27	Naturally occurring	No

**Turbidity** - Turbidity is a measure of cloudiness of the water. Turbidity has no health effects. MCWA monitors turbidity because it is a good indicator of the effectiveness of our filtration systems and water quality. State regulations require that turbidity must always be below 1 NTU in the combined filter effluent. The regulations also require that 95% of samples collected from the entry point have measurements below 0.3 NTU and the monthly average for distribution system samples be below 5 NTU. Averages, ranges and lowest monthly percentages are listed.

Turbidity - Entry Point	NTU	NA	TT	0.05 (0.01 - 0.12) 100% < 0.3 NTU	Soil Runoff	No
Turbidity - Distribution	NTU	NA	5	3.51 - March	Soil Runoff	No

**Microbiological** - No more than 5% of monthly samples can be positive. The highest monthly % positive and number of samples is listed. Since we had 2 total coliform positive samples in September in the town of Richmond, we triggered a Level 1 assessment. This assessment is to assess the coliform contamination and take corrective action against defects in the water system.

Total Coliform Bacteria	NA	0	TT	1.2% - September - 4 samples	Naturally occurring	No
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**Disinfectant and Disinfectant By-products (DBPs)** - Chlorine has a MRDL (Maximum Residual Disinfectant Level) and MRDLG (MRDL Goal) rather than an MCL and MCLG (Averages and ranges are listed). For the DBPs (Total Trihalomethanes and Haloacetic Acids) the annual system average, range for all locations, and highest locational running annual average for all locations are listed.

Chlorine Residual - Entry Point	mg/L	NA	MRDL = 4	1.17 (0.9 - 1.42) 0.76 (0.53 - 1.39)	Additive for control of microbes	No
Chlorine Residual - Distribution	mg/L	NA	MRDL = 4	0.55 (ND - 2.09)	Additive for control of microbes	No
Total Trihalomethanes (TTHMs)	µg/L	NA	80	45.25 (26-64)	Byproduct of water chlorination	No
				Max. LRAA = 50.8		
Haloacetic Acids (HAAs)	µg/L	NA	60	18 (12 - 21)	Byproduct of water chlorination	No
				Max. LRAA = 21.3		

**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	0.160 (None) 0.005 - 0.200	Corrosion of household plumbing	No
Lead - Customer Tap Samples	µg/L	0	AL = 15	7.2 (Two) ND - 29	Corrosion of household plumbing	No

\*There is no MCL set for sodium in water. However, EPA has recommended that 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.

**Unregulated Contaminant Monitoring (UCMR4)** - 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 began monitoring for the fourth list (UCMR 4) in 2018. For more information on this process go to <https://drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR>.

Alcohols, Metals, Pesticides, SVOCs, and Cyantoxins	Entry Points		Lake Ontario Supply	
	Units	MCL	Shoremont WTP	Violation Yes or No
Manganese	µg/L	NA	ND	NA
Bromide	µg/L	NA	37 (37)	NA
Total Organic Carbon	mg/L	NA	2.4 (2.4)	NA

  

HAA Groups	Distribution System	Combined Summary - 15 Sites
Total HAA (5)	µg/L	60 9.5 (3.2 - 15)
Total HAA (6) Br	µg/L	NA 0.49 (0.54 - 7.4)
Total HAA (9)	µg/L	NA 14.04 (3.8 - 19)
Bromochloroacetic acid	µg/L	NA 1.43 (0.54 - 2.3)
Bromodichloroacetic acid	µg/L	NA 2.25 (ND - 3.2)
Chlorodibromoacetic acid	µg/L	NA 0.8 (ND - 1.4)
Dibromoacetic acid	µg/L	NA 0.42 (ND - 1.3)
Dichloroacetic acid	µg/L	NA 3.6 (2.1 - 5.1)
Trichloroacetic acid	µg/L	NA 5.52 (0.95 - 10)

## Compounds Tested For But Not Detected

Benzene	Methyl Tert-butyl ether (MTBE)	Butachlor	Nitrite
Bromobenzene	Ethylbenzene	Chlordane	Selenium
Bromochloromethane	Hexachlorobutadiene	Di(2-Ethylhexyl) Adipate	Silver
Bromomethane	p-Iso propyltoluene	Dieldrin	Thallium
n-Butylbenzene	Methyl Tert-butyl ether (MTBE)	Endrin	Zinc
sec-Butylbenzene	Methylene Chloride (Dichloromethane)	Heptachlor	Surfactants (Foaming Agents)
tert-Butylbenzene	n-Propylbenzene	Heptachlor Epoxide	Gross Alpha
Carbon Tetrachloride	Styrene	Hexachlorobenzene	Total Uranium
Chlorobenzene	1,1,2-Tetrachloroethane	Hexachlorocyclopentadiene	Germanium
Chloroethane	1,1,2,2-Tetrachloroethane	Isophorone	alpha-Hexachlorocyclohexane
Chloromethane	Tetrachloroethene	Lindane (gamma-BHC)	Chlorpyrifos
2-Chlorotoluene	Toluene	Methoxychlor	Dimethipin
4-Chlorotoluene	1,2,3-Trichlorobenzene	Metolachlor	Ethoprop
Dibromomethane	1,2,4-Trichlorobenzene	Metribuzin	Oxyfluoren
1,2-Dichlorobenzene	1,1,1-Trichloroethane	p,p' DDD	Profenofos
1,3-Dichlorobenzene	1,1,2-Trichloroethane	p,p' DDE	Tebuconazole
1,4-Dichlorobenzene	Trichloroethene	p,p' DDT	Permethrin, cis & trans
Dichlorodifluoromethane	Trichlorofluoromethane	PCB's Total	Tribufos
1,1-Dichloroethane	1,2,3-Trichloropropane	Pentachlorophenol	Butylated hydroxyanisole
1,2-Dichloroethane	1,2,4-Trimethylbenzene	Propachlor	o-Toluidene
1,1-Dichloroethene	1,3,5-Trimethylbenzene	Simazine	Quinoline
cis-1,2-Dichloroethene	Vinyl Chloride	Total Chlordane	1-Butanol
trans-1,2-Dichloroethene	o-Xylene	Toxaphene	2-Methoxyethanol
1,2-Dichloropropane	m, p-Xylene	Antimony	2-Propen-1-ol
1,3-Dichloropropane	Total Xylene	Beryllium	Monobromoacetic acid
2,2-Dichloropropane	Aldrin	Chromium	Monochloroacetic acid
1,1-Dichloropropene	Atrazine	Cyanide	Tribromoacetic acid
1,3-Dichloropropene (Cis)	Benzo(a)pyrene	Mercury	
1,3-Dichloropropene (Trans)	Bis(2-Ethylhexyl)Phthalate	Nickel	

For more information on MCWA's water quality monitoring program call Customer Service at 585-442-7200 or visit our website at [www.mcwa.com](http://www.mcwa.com).