

MCWA - Water Quality Table

Detected Substances

2017 results except as noted

Supply				Shoremont & Webster WTPs	Corfu WTP	Purchased Water		Likely Source	Water Quality Violation
Source (Source Type)				Lake Ontario (Surface Water)	Well Field (Groundwater)	Hemlock WTP	ECWA		
Substances	Units	MCLG	MCL	Range of detected values					Yes or No
Barium	mg/L	2	2	0.019 - 0.028	0.1 - 0.16	0.016	0.019 - 0.021	Erosion of natural deposits	No
Chloride	mg/L	NA	250	25 - 68	28 - 65	36 - 38	21 - 24	Naturally occurring	No
Fluoride	mg/L	NA	2.2	0.03 - 0.93	NR	0.07 - 0.78	0.1 - 0.73	Natural and additive - promotes strong teeth	No
Iron	µg/L	NA	300	ND	ND - 38	ND	ND	Naturally occurring	No
Nitrate	mg/L	10	10	ND - 0.39	ND - 0.36	ND - 0.23	0.13 - 0.29	Erosion of natural deposits	No
Sodium	mg/L	NA	NS	15 - 17	29 - 76*	20 - 21	10 - 11	Naturally occurring	No
Sulfate	mg/L	NA	250	26 - 58	28 - 49	12 - 13	20 - 21	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 - 0.08) 100% < 0.3 NTU	NR	0.06 (0.03 - 0.11) 100% < 0.3 NTU	0.09 (0.04 - 0.19) 100% < 0.3 NTU	Soil Runoff	No
Turbidity - Distribution	NTU	NA	5	0.12 - March	0.23 - January	0.12 - March	0.23 - January	Soil Runoff	No

Microbiological - No more than 5% of monthly samples can be positive. The highest monthly % positive and number of samples is listed.

Total Coliform Bacteria	NA	0	TT	1.3% - August 5 samples	ND	1.3% - August 5 samples	ND	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	1.15 (0.14 - 1.77) 0.76 (0.29 - 1.01)	0.7 (0.32 - 1.54)	0.93 (0.19 - 1.72)	1.43 (0.56 - 1.86)	Additive for control of microbes	No
Chlorine Residual - Distribution	mg/L	NA	MRDL = 4	0.54 (ND - 2.2)	0.39 (ND - 1.25)	0.54 (ND - 2.2)	0.39 (ND - 1.25)	Additive for control of microbes	No
Total Trihalomethanes (TTHMs)	µg/L	NA	80	41.9 (18 - 88) Max. LRAA = 65.5	47.1 (28 - 63) Max. LRAA = 56.3	41.9 (18 - 88) Max. LRAA = 65.5	47.1 (28 - 63) Max. LRAA = 56.3	Byproduct of water chlorination	No
Haloacetic Acids (HAAs)	µg/L	NA	60	10.7 (3 - 30) Max. LRAA = 18.3	9.8 (ND - 24) Max. LRAA = 14.3	10.7 (3 - 30) Max. LRAA = 18.3	9.8 (ND - 24) Max. LRAA = 14.3	Byproduct of water chlorination	No

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 (2015)	0.119 (None) 0.007 - 0.550 (2015)	0.094 (None) 0.005 - 0.500 (2015)	0.119 (None) 0.007 - 0.550 (2015)	Corrosion of household plumbing	No
Lead - Customer Tap Samples	µg/L	0	AL = 15	12 (Four) ND - 63 (2015)	1.8 (None) ND - 3.8 (2015)	12 (Four) ND - 63 (2015)	1.8 (None) ND - 3.8 (2015)	Corrosion of household plumbing	No

Unregulated Contaminant 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 www.drinktap.org/home/water-information/water-quality/ucmr3.aspx.

Supply (Source)	Units	MCL	Shoremont WTP (Lake Ontario)		Corfu WTP (Well field)		Purchased Water ECWA	
			At Entry Point to System	At End of System	At Entry Point to System	At End of System	At Entry Point to MCWA System	
Chromium (total)	µg/L	100	ND-0.23 (2014)	ND-0.44 (2014)	ND-0.2 (2014)	ND-0.22 (2014)	ND-0.26 (2014)	
Molybdenum	µg/L	NS	1.2-1.3 (2014)	ND-1.3 (2014)	ND (2014)	ND (2014)	1.0-1.2 (2014)	
Strontium	µg/L	NS	160-190 (2014)	130-210 (2014)	120-260 (2014)	150-240 (2014)	130-170 (2014)	
Vanadium	µg/L	NS	ND-0.2 (2014)	0.24-0.50 (2014)	ND (2014)	ND-0.2 (2014)	ND-0.2 (2014)	
Chromium-6	µg/L	100	0.074-0.085 (2014)	0.16-0.24 (2014)	ND (2014)	ND-0.061 (2014)	0.065-0.090 (2014)	
Chlorate	µg/L	NS	ND-130 (2014)	120-350 (2014)	43-270 (2014)	40-140 (2014)	ND (2014)	
Chloromethane	µg/L	5 (NYS)	ND (2014)	ND (2014)	ND-0.023 (2014)	ND (2014)	ND (2014)	

*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.

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.

LRAA = Locational Running Annual Average - The annual average contaminant concentration at a monitoring site.

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.

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-Dichloroethene (Trans), 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, Alachlor, Aldicarb Sulfone, Aldicarb Sulfoxide, Aldrin, Androstene, Antimony, Arsenic, Asbestos, Atrazine, Benzene, Benzo(a)pyrene, Beryllium, Bromobenzene, Bromochloromethane, Bromomethane, Butachlor, Cadmium, Carbaryl, Carbofuran, Carbon Tetrachloride, Chlordane, Chlorobenzene, Chloroethane, Chlorodifluoromethane, Chloromethane, cis-1,2-Dichloroethene, Cobalt, Cryptosporidium, Cyanide, Dacthal, Dalapon, DBCP, DCPA, Mono & Di-Acid Degradate, Di(2-Ethylhexyl) Adipate, Di(2-Ethylhexyl) Phthalate, Dibromomethane, Dicamba, Dichlorodifluoromethane, Dichloromethane, Dieldrin, Dinoseb, Dioxin, Diquat, Endothal, Endrin, Equilin, Estradiol, Estriol, Estrone, Ethylbenzene, Ethynylestradiol, Glyphosate, Gross Alpha, Gross Beta, Heptachlor, Heptachlorepoxyde, 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, Radium 226/228, sec-Butylbenzene, Selenium, Silver, Simazine, Styrene, Surfactants, tert-Butylbenzene, Testosterone, Tetrachloroethene, Thallium, Toluene, Toxaphene, trans-1,2-Dichloroethene, Trichloroethene, Trichlorofluoromethane, Uranium, Vinyl Chloride, Xylene, Zinc

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