

MCWA Water Quality Summary Table

Detected Substances										2019 results except as noted									
Supply:				MCWA Production Water:				MCWA Purchased Water:				Likely Source:		Water Quality Violation:					
				SWTP & WWTP		CWTP		Rochester		ECWA									
Source: (Source Type)				Lake Ontario (Surface Water)		Well Field (Groundwater)		Hemlock Lake (Surface Water)		Lake Erie (Surface Water)									
Substances:				Units		MCLG		MCL		Range of detected values									
Barium	mg/L	2	2	0.019 - 0.025	0.12 - 0.14	0.015 - 0.017	0.019 - 0.023	Erosion of natural deposits		No									
Chloride	mg/L	NA	250	24 - 32	44 - 64	36	21 - 22	Naturally occurring		No									
Fluoride	mg/L	NA	2.2	0.15 - 1.43	0.13 - 0.15	0.11 - 0.77	0.11 - 0.8	Natural and additive - promotes strong teeth		No									
Nitrate	mg/L	10	10	0.22 - 0.39	ND	ND - 0.25	0.14 - 0.23	Erosion of natural deposits		No									
Perfluorohexanesulfonic acid	µg/L	NS	NS	0.002	ND	ND	ND	Used to manufacture textiles		No									
Perfluorooctanesulfonic acid	µg/L	NS	NS	0.0036	ND	ND	ND	Used to manufacture textiles		No									
Perfluorooctanoic acid	µg/L	NS	NS	0.0022 - 0.0035	ND	ND	0.0021	Used to manufacture textiles		No									
Sodium	mg/L	NA	NS	16 - 20	56 - 75*	20 - 21*	14	Naturally occurring		No									
Sulfate	mg/L	NA	250	24 - 29	47 - 52	11 - 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 highest monthly average for distribution system samples be below 5 NTU. Averages, annual ranges and lowest monthly percentages are listed.																			
Turbidity - Entry Point	NTU	NA	TT	0.04 (0.02 - 0.13) 100% < 0.3 NTU	NR	0.06 (0.03 - 0.11) 100% < 0.3 NTU	NA	Soil Runoff		No									
Turbidity - Distribution	NTU	NA	5	3.32 - July	1.37 - February	3.32 - July	1.37 - February	Soil Runoff		No									
Microbial Parameters - 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	0.62% - September 2 samples	ND	0.62% - September 2 samples	ND	Naturally occurring		No									
Source Water Microbial Pathogens - The highest positive month and number of samples is listed. In our treatment processes, <i>Giardia Lambli</i> a is removed / inactivated through a combination of filtration and disinfection or by disinfection alone.																			
Giardia Lambli	Cysts/L	0	TT	SWTP - 1 (May) WWTP - 1 (Feb.) 2 Samples	NR	ND	NR	Naturally occurring		No									
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	1.19 (0.49 - 1.7) 0.77 (0.36 - 1.05)	0.84 (0.5 - 1.5)	0.89 (0.6 - 1.70)	NA	Additive for control of microbes		No									
Chlorine Residual - Distribution	mg/L	NA	MRDL = 4	0.56 (ND - 2.2)	0.51 (ND - 1.34)	0.56 (ND - 2.2)	0.15 (ND - 1.34)	Additive for control of microbes		No									
Total Trihalomethanes (TTHMs)	µg/L	NA	80	41.1 (14 - 84) Max. LRAA = 53.8	43.9 (17 - 75) Max. LRAA = 47	41.1 (14 - 84) Max. LRAA = 53.8	43.9 (17 - 75) Max. LRAA = 47	Byproduct of water chlorination		No									
Haloacetic Acids (HAAs)	µg/L	NA	60	11.4 (ND - 22) Max. LRAA = 16.3	9.8 (ND - 23) Max. LRAA = 10.1	11.4 (ND - 22) Max. LRAA = 16.3	9.8 (ND - 23) Max. LRAA = 10.1	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	0.160 (None) 0.005 - 0.200	0.110 (None) 0.005 - 0.240	0.160 (None) 0.005 - 0.200	0.110 (None) 0.005 - 0.240	Corrosion of household plumbing		No									
Lead - Customer Tap Samples	µg/L	0	AL = 15	7.2 (Two) ND - 29	3.0 (One) ND - 76	7.2 (Two) ND - 29	3.0 (One) ND - 76	Corrosion of household plumbing		No									
* There is no MCL set for sodium in water. However, EPA recommends 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, Indicators, Metals, Pesticides, SVOCs, and Cvatoxins:	Entry Points:			Lake Ontario Supplies:			Purchased Water Supplies:			Groundwater Supply:	Water Quality Violation:								
	Units	MCL		SWTP	WWTP	Rochester	ECWA	CWTP	Yes or No										
Manganese	µg/L	NA		ND	ND	ND	3.5 (0.77 - 6.3)	8.0 (6 - 10)	NA										
Bromide	µg/L	NA		36.3 (36 - 37)	36 (34 - 37)	NR	NR	NR	NA										
Total Organic Carbon	mg/L	NA		2.3 (2 - 2.4)	2.2 (1.9 - 2.3)	NR	NR	NR	NA										
HAA Groups:	Distribution System:			Combined System Summary:															
Total HAA (5)	µg/L	60		14.1 (0.74 - 31)							No								
Total HAA (6) Br	µg/L	NA		7.4 (ND - 12)							NA								
Total HAA (9)	µg/L	NA		21 (7.4 - 42)							NA								
Bromochloroacetic acid	µg/L	NA		2.2 (ND - 4.4)							NA								
Bromodichloroacetic acid	µg/L	NA		3.1 (ND - 5.9)							NA								
Chlorodibromoacetic acid	µg/L	NA		1 (ND - 1.6)							NA								
Dibromoacetic acid	µg/L	NA		0.5 (ND - 1.4)							NA								
Dichloroacetic acid	µg/L	NA		6 (0.74 - 15)							NA								
Trichloroacetic acid	µg/L	NA		7.5 (ND - 15)							NA								

Key Terms and Abbreviations used

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 MCLs.

NA = Not applicable. **NR** = Not required / Not reported. **NS** = No standard.

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

µg/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 measurement of water clarity.

CWTP = Corfu Water Treatment Plant. **SWTP** = Shorement Water Treatment Plant. **WWTP** = Webster Water Treatment Plant.

MCWA = Monroe County Water Authority. **Rochester** = City of Rochester. **ECWA** = Erie County Water Authority.

Compounds Tested For But Not Detected

Benzene	Tetrachloroethene	Benzo(a)pyrene	Germanium
Bromobenzene	Toluene	Butachlor	alpha-Hexachlorocyclohexane
Bromochloromethane	1,2,3-Trichlorobenzene	Carbaryl	Chlorpyrifos
Bromomethane	1,2,4-Trichlorobenzene	Dalapon	Dimethipin
n-Butylbenzene	1,1,1-Trichloroethane	Di(2-Ethylhexyl) Adipate	Ethoprop
sec-Butylbenzene	1,1,2-Trichloroethane	Di(2-Ethylhexyl) phthalate (DEHP)	Oxyfluorene
tert-Butylbenzene	Trichloroethene	Dicamba	Profenofos
Carbon Tetrachloride	Trichlorofluoromethane	Dieldrin	Tebuconazole
Chlorobenzene	1,2,3-Trichloropropane	Dinoseb	Permethrin, cis & trans
Chloroethane	1,2,4-Trimethylbenzene	Diquat	Tribufos
Chloromethane	1,3,5-Trimethylbenzene	Endothall	Butylated hydroxyanisole
2-Chlorotoluene	Vinyl Chloride	Glyphosate	o-Toluidene
4-Chlorotoluene	o-Xylene	Hexachlorobenzene	Quinoline
Dibromomethane	m, p-Xylene	Hexachlorocyclopentadiene	1-Butanol
1,2-Dichlorobenzene	Total Xylene	3-Hydroxycarbofuran	2-Methoxyethanol
1,3-Dichlorobenzene	Alachlor	Methomyl	2-Propen-1-ol
1,4-Dichlorobenzene	Aldicarb	Metolachlor	Monobromoacetic acid
Dichlorodifluoromethane	Aldicarb sulfoxide	Metribuzin	Monochloroacetic acid
1,1 Dichloroethane	Aldicarb sulfone	Oxamyl (vydate)	Tribromoacetic acid
1,2-Dichloroethane	Atrazine	Perchlorate	1, 4-Dioxane
1,1-Dichloroethene	Carbofuran	Picloram	N-ethyl Perfluorooctanesulfonamidoacetic acid
cis-1,2-Dichloroethene	Chlordane	Propachlor	N-methyl Perfluorooctanesulfonamidoacetic acid
trans-1,2-Dichloroethene	Dibromochloropropane	Simazine	Perfluorobutanesulfonic acid
1,2-Dichloropropane	2, 4-D	2, 3, 7, 8-TCDD (Dioxin)	Perfluorodecanoic acid
1,3-Dichloropropane	Endrin	Antimony	Perfluorododecanoic acid
2,2-Dichloropropane	Ethylene Dibromide	Beryllium	Perfluoroheptanoic acid
1,1-Dichloropropene	Heptachlor	Chromium	Perfluorohexanoic acid
1,3-Dichloropropene(cis)	Heptachlor Epoxide	Cyanide	Perfluoronononic acid
1,3-Dichloropropene(trans)	Lindane (gamma-BHC)	Mercury	Perfluorotetradecanoic acid
Ethylbenzene	Methoxychlor	Nickel	Perfluorotridecanoic acid
Hexachlorobutadiene	p,p' DDD	Nitrite	Perfluoroundecanoic acid
p-Isopropyltoluene	p,p' DDE	Selenium	
Methyl Tert-butyl ether (MTBE)	p,p' DDT	Silver	
Methylene Chloride (Dichloromethane)	PCB's Total	Thallium	
n-Propylbenzene	Pentachlorophenol	Zinc	
Styrene	Toxaphane	Surfactants (Foaming Agents)	
1,1,1,2-Tetrachloroethane	2, 4, 5-TP (Silvex)	Cryptosporidium	
1,1,1,2-Tetrachloroethane	Aldrin		

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