

MCWA Water Quality Summary Table

2023 Calendar Year Results -

Detected Substances:	Supply Source -			MCWA Production Water:		MCWA Purchased Water:		Likely Sources in Drinking Water:	Water Quality Violation:
	Source - (Source Type)			SWTP & WWTP -	CWTP -	Rochester -	ECWA -		
	Units	MCLG	Regulatory Limit	Lake Ontario (Surface Water)	Well Field (Groundwater)	Hemlock Lake (Surface Water)	Lake Erie (Surface Water)		
	Range of detected values:								
Barium	mg/L	2	2	0.018 - 0.021	0.09 - 0.1	0.014	0.02	Erosion of natural deposits	No
Chloride	mg/L	NA	250	23 - 29	49 - 84	35 - 39	20 - 22	Naturally occurring	No
Chromium	µg/L	100	100	ND	ND - 2.6	ND	ND	Erosion of natural deposits	No
Fluoride	mg/L	NA	2.2	0.2 - 0.98	0.13 - 0.15	0.08 - 0.77	0.2 - 0.73	Naturally occurring & additive for dental health	No
Manganese	µg/L	NA	300	ND	6.1 - 21	ND	ND	Naturally occurring	No
Nitrate	mg/L	10	10	ND - 0.5	ND	ND	0.28	Erosion of natural deposits	No
Perfluorooctanesulfonic acid (PFOS)	ng/L	NS	10	ND - 2.5	ND	ND	ND	Environmental releases from textile sources	No
Perfluorobutanoic acid (PFBA)	ng/L	NS	10	ND - 3.1	ND - 2.7	ND - 3.2	ND - 5.2	Environmental releases from textile sources	No
Selenium	µg/L	50	50	ND - 3.6	ND - 7.1	ND	ND	Erosion of natural deposits	No
Sodium	mg/L	NA	NS	14 - 17	81 - 94 *	19 - 21 *	12 - 14	Naturally occurring	No
Sulfate	mg/L	NA	250	24 - 27	46 - 59	11 - 12	19 - 20	Naturally occurring	No
Turbidity - Turbidity is a measure of cloudiness or clarity 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 (0.01 - 0.09) 100% < 0.3 NTU	NR	0.05 (0.03 - 0.14) 100% < 0.3 NTU	0.08 (0.03 - 0.19) 100% < 0.3 NTU	Soil Runoff	No
Turbidity - Distribution	NTU	NA	5	2.44 - 10/06/2023	2.36 - 10/24/2023	2.44 - 10/06/2023	2.36 - 10/24/2023	Soil Runoff	No
Microbial Parameters - For total coliform bacteria, a Treatment Technique violation occurs when more than 5% of monthly samples are positive. The highest monthly % positive and number of positive samples is listed. For E. coli bacteria, a MCL violation occurs when a total coliform positive sample is positive for E. coli and a repeat total coliform sample is positive or when a total coliform positive sample is negative for E. coli but a repeat total coliform sample is positive and the sample is also positive for E. coli. The number of positive E. coli samples is listed.									
Total Coliform Bacteria	NA	0	TT	0.3% - September 1 sample	0% None Detected.	0.3% - September 1 sample	0% None Detected.	Naturally present in the environment	No
Escherichia coli (E. coli) Bacteria	NA	0	1	1 sample - 10/31/23	ND	1 sample - 10/31/23	ND	Human and animal fecal waste	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 averages, ranges for all locations, and highest locational running annual averages for all locations are listed.									
Chlorine Residual- Entry Point	mg/L	NA	MRDL = 4	1.16 (0.83 - 1.33) 0.82 (0.54 - 1.05)	1.14 (0.62 - 1.65)	0.9 (0.71 - 1.37)	1.41 (0.62 - 1.86)	Additive for control of microbes	No
Chlorine Residual - Distribution	mg/L	NA	MRDL = 4	0.6 (ND - 2.03)	0.7 (ND - 1.7)	0.6 (ND - 2.03)	0.7 (ND - 1.7)	Additive for control of microbes	No
Total Trihalomethanes (TTHMs)	µg/L	NA	80	39 (2 - 79) Max. LRAA = 57	50 (24 - 92) Max. LRAA = 57	39 (2 - 79) Max. LRAA = 57	50 (24 - 92) Max. LRAA = 57	Byproduct of water chlorination	No
Haloacetic Acids (HAAs)	µg/L	NA	60	11.5 (ND - 35) Max. LRAA = 19.3	9.6 (ND - 24) Max. LRAA = 16.9	11.5 (ND - 35) Max. LRAA = 19.3	9.6 (ND - 24) Max. LRAA = 16.9	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. (2023 monitoring period)									
Copper - Customer Tap Samples	mg/L	1.3	AL = 1.3	0.259 (None) 0.0023 - 0.68	0.142 (None) 0.004 - 0.29	0.259 (None) 0.0023 - 0.68	0.142 (None) 0.004 - 0.29	Corrosion of household plumbing	No
Lead - Customer Tap Samples	µg/L	0	AL = 15	7.2 (Five) ND - 53	0.63 (None) ND - 2.8	7.2 (Five) ND - 53	0.63 (None) ND - 2.8	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 (UCMR5) - The EPA issues lists of 30 unregulated contaminants or less to be monitored by public water systems. This provides baseline occurrence data that the EPA combines with toxicological research to make decisions about future drinking water regulations. UCMR5 was published in 2021 and requires public water systems to participate in monitoring between 2023 - 2025 using analytical methods developed by the EPA and consensus organizations. MCWA began UCMR5 monitoring in 2023. UCMR5 detected substances are listed. The complete list of UCMR5 substances may be found in the AWQR supplement.									
Metals:	Entry Points:		Lake Ontario Supplies -		Purchased Water Supplies -		Groundwater Supply -		Water Quality Violation:
	Units	Regulatory Limit	SWTP	WWTP	Rochester	ECWA	CWTP		
Lithium	µg/L	NA	ND	ND	ND	NR	12.1	NA	
Per & Polyfluorinated Alkyl Acids (PFAS):									
[29 PFAS Substances]	ng/L	NA	ND	ND	ND	NR	ND	NA	

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

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 the MCL.

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** = Shoremont 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	Trichlorofluoromethane	Endothall	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
Bromobenzene	1,2,3-Trichloropropane	Glyphosate	Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)
Bromochloromethane	1,2,4-Trimethylbenzene	Hexachlorobenzene	Perfluoro-3-methoxypropanoic acid (PFMPA)
Bromomethane	1,3,5-Trimethylbenzene	Hexachlorocyclopentadiene	Perfluoro-4-methoxybutanoic acid (PFMBA)
n-Butylbenzene	Vinyl Chloride	3-Hydroxycarbofuran	Perfluorobutanesulfonic acid (PFBS)
sec-Butylbenzene	o-Xylene	3,5-Dichlorobenzoic Acid	Perfluorooctanoic acid (PFOA)
tert-Butylbenzene	m, p-Xylene	Methomyl	Perfluorodecanoic acid (PFDA)
Carbon Tetrachloride	Total Xylene	Metolachlor	Perfluorododecanoic acid (PHDoA)
Chlorobenzene	Acifluorfen	Metribuzin	Perfluoroheptanesulfonic acid (PFHpS)
Chloroethane	Alachlor	Oxamyl (vydate)	Perfluoroheptanoic acid (PFHpA)
Chloromethane	Aldicarb	Paraquat	Perfluorohexanesulfonic acid (PFHxS)
2-Chlorotoluene	Aldicarb sulfoxide	Perchlorate	Perfluorohexanoic acid (PFHxA)
4-Chlorotoluene	Aldicarb sulfone	Picloram	Perfluorononanoic acid (PFNA)
Dibromomethane	Atrazine	Propachlor	Perfluoropentanesulfonic acid (PFPeS)
1,2-Dichlorobenzene	Baygon	Simazine	Perfluoropentanoic acid (PFPeA)
1,3-Dichlorobenzene	Bentazon	2, 3, 7, 8-TCDD (Dioxin)	Perfluorotetradecanoic acid (PFTA)
1,4-Dichlorobenzene	Carbofuran	Antimony	Perfluorotridecanoic acid (PFTA)
Dichlorodifluoromethane	Chlordane	Beryllium	Perfluoroundecanoic acid (PFUnA)
1,1 Dichloroethane	Dibromochloropropane	Cyanide	
1,2-Dichloroethane	2, 4-D	Mercury	
1,1-Dichloroethene	Endrin	Nickel	
cis-1,2-Dichloroethene	Ethylene Dibromide	Nitrite	
trans-1,2-Dichloroethene	Heptachlor	Silver	
1,2-Dichloropropane	Heptachlor Epoxide	Thallium	
1,3-Dichloropropane	Lindane (gamma-BHC)	Zinc	
2,2-Dichloropropane	Methoxychlor	Surfactants (Foaming Agents)	
1,1-Dichloropropene	p,p' DDD	Cryptosporidium	
1,3-Dichloropropene(cis)	p,p' DDE	Giardia Lamblia	
1,3-Dichloropropene(trans)	p,p' DDT	Monobromoacetic acid	
Ethylbenzene	PCB's Total	Monochloroacetic acid	
Hexachlorobutadiene	Pentachlorophenol	Tribromoacetic acid	
p-Isopropyltoluene	Toxaphane	Gross Alpha Particles	
Methyl Tert-butyl ether (MTBE)	2, 4, 5-TP (Silvex)	Radium 226	
Methylene Chloride (Dichloromethane)	Aldrin	Radium 228	
n-Propylbenzene	Benzo(a)pyrene	Combined Radium 226/228	
Styrene	Butachlor	Uranium	
1,1,1,2-Tetrachloroethane	Carbaryl	11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS)	
1,1,2,2-Tetrachloroethane	Dalapon	1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	
Tetrachloroethene	Di(2-Ethylhexyl) Adipate	1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	
Toluene	Di(2-Ethylhexyl) phthalate (DEHP)	1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	
1,2,3-Trichlorobenzene	Dicamba	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	
1,2,4-Trichlorobenzene	Dieldrin	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF30NS)	
1,1,1-Trichloroethane	Dinoseb	Hexafluoropropylene oxide dimer acid (HFPO-DA)(GenX)	
1,1,2-Trichloroethane	1, 4-Dioxane	N-ethyl Perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	
Trichloroethene	Diquat	N-methyl Perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	

SCAN CODE FOR AWQR REPORT:

