

MCWA - Water Quality Table

Detected Substances

2003 results except as noted

Supply (Source)				Shoremont WTP (L. Ontario)	Brockport WTP (L. Ontario)	Corfu WTP (Well)	Purchased Water Hemlock WTP (Hemlock L.)	Purchased Water C. Batavia (Well and Tonawanda Cr.)	Purchased Water ECWA (Niagara River & L. Erie)	Purchased Water T. Ontario (L. Ontario)		
Substances	Units	MCLG	MCL	Range of detected values	Range of detected values	Range of detected values	Range of detected values	Range of detected values	Range of detected values	Range of detected values	Likely Source	Meets EPA Standards
Barium	mg/L	2	2	0.02 – 0.022	0.022 – 0.024	0.065 – 0.07	0.016 – 0.019	0.013	0.021	.024	Erosion of natural deposits	Yes
Chloride	mg/L	NA	250	21 - 26	27 - 31	40 - 47	31 - 34	69	17 - 22	NA	Erosion of natural deposits	Yes
Cyanide	ug/L	200	200	ND	ND	ND	ND	ND	ND	10	Discharge from metal/plastic/fertilizer factories	Yes
Fluoride	mg/L	NA	2.2	0.2 – 1.3	0.7 – 1.4	NA	0.2 – 1.1	0.7 – 1.1	0.7 – 1.1	0.08	Natural and additive which promotes strong teeth	Yes
Iron	ug/L	NA	300	ND	ND	ND - 73	ND - 150	ND	ND	NR	Naturally occurring	Yes
Nitrate	mg/L	10	10	0.38 - 0.46	0.39 - 0.51	ND	ND – 0.2	1.1	0.22	0.61	Erosion of natural deposits	Yes
Selenium	ug/L	50	50	ND	ND	ND	ND	1.4	ND	7 (2002)	Cropland runoff, factory discharge	Yes
Sodium	mg/L	NA	NS	13	14	100 - 110	17 - 18	38	12	NA	Naturally Occurring	Yes
Sulfate	mg/L	NA	250	29	28	57 - 59	18	43	23	NA	Naturally Occurring	Yes
Color	Color Units	NA	15	ND - 3	ND - 3	ND	ND - 3	ND	ND	NA	Naturally Occurring	Yes
Radionuclides Gross Alpha	pCi/L	NA	15	ND	ND	ND	ND (2001)	0.029 (2000)	0.4	0.47	Erosion of natural deposits	Yes
Radionuclides Gross Beta	pCi/L	NA	50	ND	ND	ND	ND (2001)	1.2 (2000)	1.7	1.1	Decay of natural and man-made deposits	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	0.06 – 0.14 100%	0.01 – 0.11 100%	NA	0.03 – 0.22 100%	0.02 – 0.05 100%	0.03 – 0.30 99.5%	0.06 – 0.09 100%	Soil runoff	Yes
Microbial – No more than 5% of monthly samples can be positive. The highest monthly % positive is listed.												
Coliform	% Positive	0	5%/Mo	0.4% November	ND	ND	2% August	ND	ND	ND	Naturally Occurring	Yes
Disinfectant and Disinfectant By-products (DBPs) - Average and Range are listed. * The MDRL (Maximum Disinfectant Residual Level) and MDRLG (Maximum Disinfectant residual Level Goal) for chlorine are both set at 4 mg/L.												
Chlorine Residual - Entry Point	mg/L	NA	4 *	1.0 - 1.5	0.9 – 1.9	0.1 – 1.8	1.0 – 1.5	0.9 – 1.2	0.6 – 2.8	0.9 – 1.1	Water additive used to control microbes	Yes
Chlorite	mg/L	0.8	1	NR	0.084 – 0.360	NR	NR	NR	NR	NR	Water additive used to control microbes	Yes
Total THMs	ug/L	NA	80	32 (19-57)	28 (16-45)	NR	45 (19-67)	48 (42 – 54)	64 (40-97)	26 (16-36)	By-product of water chlorination	Yes
Haloacetic Acids (HAA5)	ug/L	NA	60	12 (5-22)	12 (5-28)	NR	24 (14-33)	16 (10 – 22)	23 (10-25)	8 (2-11)	By-product of water chlorination	Yes
Lead and Copper - 90% of samples must be less than the Action Level (AL). 90th Percentile value and the number of samples exceeding AL are listed.												
Copper (Customer Tap Samples)	mg/L	1.3	AL=1.3	0.232 None	0.08 None (2002)	0.388 None	0.140 None	0.032 none	0.388 None	0.11 None	Corrosion of household plumbing	Yes
Lead (Customer Tap Samples)	ug/L	0	AL=15	8 One	4 None (2002)	3 None	7 None	3.4 One	3 None	6 None	Corrosion of household plumbing	Yes

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.

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

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

Note: The following contaminants were tested for:

1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 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, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,3-Dichloropropene(Cis), 1,3-Dichloropropene(Trans), 1,4-Dichlorobenzene, 2,2-Dichloropropane, Dioxin, 2,4 D, 2-4-5 TP, 2-Chlorotoluene, 3-Hydroxycarbofuran, 4,4'-DDT, 4-Chlorotoluene, Aldicarb Sulfone, Aldicarb Sulfoxide, Aldrin, Aluminum, Antimony, Arsenic, Atrazine, Barium, Benzene, Benzo(a)pyrene, Beryllium, Bis(2-Ethylhexyl)Phthalate, Bromobenzene, Bromochloromethane, Bromomethane, Butachlor, Cadmium, Carbaryl, Carbofuran, Carbon Tetrachloride, Chlordane, Chlorobenzene, Chloroethane, Chloromethane, Chromium, cis-1,2-Dichloroethene, Cryptosporidium, Cyanide, DCPA, Dalapon, DBCP, Di(2-Ethylhexyl) Adipate, Dibromomethane, Dicamba, Dichlorodifluoromethane, Dichloromethane (Methylene Chloride), Dieldrin, Dinoseb, Diquat, Endothall, Endrin, Ethylbenzene, Glyphosate, Gross Alpha, Giardia, Gross Beta, Heptachlor, Heptachlorepoxyde, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Isophorone, Isopropyl Benzene, Lindane, Manganese, Mercury, Methomyl, Methoxychlor, Metolachlor, Metribuzin, Mirex, MTBE, n-Butylbenzene, Nickel, Nitrite, n-Propylbenzene, Oxamyl, PCB's, Pentachlorophenol, Pichloram, p-Isopropyltoluene, Propachlor, sec-Butylbenzene, Selenium, Silver, Simazine, Styrene, tert-Butylbenzene, Tetrachloroethene, Thallium, Toluene, Toxaphene, trans-1,2-Dichloroethene, Trichloroethene, Trichlorofluoromethane, Tritium, Vinyl Chloride, Xylene, Zinc

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