

MCWA - Water Quality Table

2002 results except as noted										
Detected Substances				Shoremont WTP	Brockport WTP	Purchased Water Hemlock WTP	Purchased Water C. Batavia	Purchased Water T.Ontario	Likely Source	
Substances	Units	MCLG	MCL	Range of detected values	Range of detected values	Range of detected values	Range of detected values	Range of detected values	Erosion of natural deposits	Meets EPA Standards
Arsenic	ug/L	NA	50	ND – 1	ND – 1.3	ND	ND	5	Erosion of natural deposits	Yes
Barium	mg/L	2	2	0.022 - 0.023	0.022 - 0.024	0.017 - 0.019	0.015	0.026	Naturally Occurring	Yes
Chloride	mg/L	NA	250	21 - 22	23 - 27	26 – 29	65	NA	Erosion of natural deposits	Yes
Fluoride	mg/L	NA	2.2	0.2 -1.4	0.4 - 1.4	0.6 - 1.0	0.69	0.83	Natural and additive which promotes strong teeth	Yes
Nitrate	mg/L	10	10	0.3 - 0.4	0.3 - 0.6	ND - 0.2	1.4	0.49	Naturally Occurring	Yes
Selenium	ug/L	50	50	ND	ND	ND	ND	7	Runoff from cropland, factory discharge	Yes
Sodium	mg/L	NA	NS	11	12	15	25	NA	Naturally Occurring	Yes
Sulfate	mg/L	NA	250	27 - 30	25 - 32	17 - 19	38	NA	Naturally Occurring	Yes
Color	Color Units	NA	15	ND - 5	ND - 5	3 - 5	5	NA	Naturally Occurring	Yes
Treatment Requirements - 95% of samples each month must be less than 0.5 NTU. Range and lowest monthly percentage is listed. Turbidity is a measure of water clarity and is used to gauge filtration performance.										
Turbidity - Entry Point	NTUs	NA	TT	0.06 – 0.23 100%	0.01 – 0.2 100%	0.03 – 0.22 100%	0.01 – 1.4 98%	0.03 – 0.09 100%	Soil runoff	Yes
Disinfectant and Disinfectant By-products (DBPs) - Average and Range is listed. * The MDRL (Maximum Disinfectant Residual Level) and MDRLG (Maximum Disinfectant residual Level Goal) for chlorine are both set at 4. HAN, HK, CP, CH, and TOX are DBPs being considered for future regulation by the EPA.										
Chlorine Residual - Entry Point	mg/L	NA	4 *	0.9 - 1.7	0.8 – 2.4	0.6 – 1.4	0.5 – 1.6	0.95 – 1.1	Water additive used to control microbes	Yes
Total THMs	ug/L	NA	80	35 (16-66)	37 (19-58)	35 (21-81)	50 (16-91)	25 (18-36)	By-product of water chlorination	Yes
Haloacetic Acids (HAA5)	ug/L	NA	60	12 (4-22)	20 (4-49)	20 (12-30)	16 (8-20)	14 (11-16)	By-product of water chlorination	Yes
Haloacetonitriles (HAN) 1998 data	ug/L	NA	50	4.4 (3.4-5.5)	NR	3.9 (1.5-5.3)	NR	NR	By-product of water chlorination	Yes
Haloketones (HAK) 1998 data	ug/L	NA	50	1.8 (0.9-3.40)	NR	4.5 (1.2-7.6)	NR	NR	By-product of water chlorination	Yes
Chloropicrin (CP) 1998 data	ug/L	NS	NS	ND	NR	0.5 (ND-0.8)	NR	NR	By-product of water chlorination	Yes
Chloral Hydrate (CH) 1998 data	ug/L	NS	NS	4.6 (1.6-12)	NR	8.5 (1.6-13)	NR	NR	By-product of water chlorination	Yes
Total Organic Halides (TOX)1998 data	ug/L	NS	NS	101 (54-158)	NR	245 (11-350)	NR	NR	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 is listed.										
Copper (Customer Tap Samples)	mg/L	1.3	AL= 1.3	0.077 None (2000)	0.080 None	0.20 None (2000)	0.040 None	0.160 None	Corrosion of household plumbing	Yes
Lead (Customer Tap Samples)	ug/L	0	AL=15	3 One (2000)	4 None	11 One (2000)	7 One	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:

Antimony, Beryllium, Cadmium, Chromium, Cyanide, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc, Radionuclides, Benzene, Bromobenzene, Bromochloromethane, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1 Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,3-Dichloropropane, 2,2-Dichloropropane, 1,1, Dichloropropene, 1,3-Dichloropropene(Cis and Trans), Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, p-Isopropyltoluene, MTBE, Methylene Chloride, Nitrobenzene, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,2,3 Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Xylenes, Vinyl chloride, Atrazine, Bis(2-Ethylhexyl)Phthalate, 1, 2-Dibromo-3-Chloropropane, EDB), Silvex, 2, 4-D, Alachlor, Aldicarb, Aldicarb Sulfone, Aldicarb Sulfoxide, Aldrin, Benzo(a)pyrene, Butachlor, Carbaryl, Carbofuran, Dalapon, DCPA, Di(2-Ethylhexyl) Adipate, Dicamba, Dieldrin, Dinoseb, Dioxin, Diquat, Endothal, Endrin, Glyphosate, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, 3-Hydroxycarbofuran, Isophorone, Lindane (gamma-BHC), Methomyl, Methoxychlor, Metolachlor, Metribuzin, Mirex, Oxamyl, PCB's, Pentachlorophenol, Picloram, p,p' DDT, Propachlor, Simazine, Chlordane, Toxaphene

A more detailed summary of MCWA's monitoring program is available on the web at www.mcwa.com or through MCWA Customer Service at 585-442-7200.