

# MCWA - Water Quality Table

Detected Substances											2005 results except as noted	
Supply (Source)				Shoremont 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						Likely Source	Meets EPA Standards	
Barium	mg/L	2	2	0.019 – 0.022	0.038 – 0.07	0.016 – 0.020	0.017	ND – 0.023	0.21	Erosion of natural deposits	Yes	
Chloride	mg/L	NA	250	19 - 24	47	26 – 36	120	22 - 45	NA	Erosion of natural deposits	Yes	
Fluoride	mg/L	NA	2.2	1.0 – 1.4	NR	0.1 – 1.2	0.7	0.1 – 1.1	0.9	Natural and additive which promotes strong teeth	Yes	
Manganese	ug/L	NA	300	0.7 – 1.4	0.02	1.8	ND	ND – 6.6	NR	Naturally Occurring	Yes	
Nickel	ug/L	NA	NS	0.6 – 0.7	0.3	0.3 – 0.5	ND	0.6 – 0.7	1.5	Naturally Occurring	Yes	
Nitrate	mg/L	10	10	0.25 - 0.42	0.34	0.17 – 0.23	0.62	0.12 – 0.39	0.57	Erosion of natural deposits	Yes	
Sodium	mg/L	NA	NS	11 - 13	130	16 – 18	60	ND - 11	NR	Naturally Occurring	Yes	
Sulfate	mg/L	NA	250	28	62	16	46	19 - 24	NR	Naturally Occurring	Yes	
Thallium	ug/L	NA	5	ND – 0.16	ND	ND	ND	ND	ND	Naturally Occurring	Yes	
Zinc	mg/L	NA	5	ND	0.26	ND	ND	ND	NR	Naturally Occurring	Yes	
Radionuclides Gross Alpha	pCi/L	NA	15	ND (2003)	ND (2003)	ND (2001)	0.29 (2000)	ND – 1.7 (2004)	0.47 (2003)	Erosion of natural deposits	Yes	
Radionuclides Gross Beta	pCi/L	NA	50	ND (2003)	ND (2003)	ND (2001)	1.2 (2000)	ND – 2.2 (2004)	1.1 (2003)	Decay of natural and man-made deposits	Yes	
<b>Organics, Pesticides, Herbicides</b>												
Dalapon	ug/L	NA	50	ND	ND	ND – 1.7	ND	ND	ND	Runoff from cropland	Yes	
<b>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.</b>												
Turbidity - Entry Point	NTUs	NA	TT	0.03 – 0.12 100%	0.03 – 0.41 NA	0.03 – 0.16 100%	0.01 – 0.04 100%	0.02 – 1.3 98.4%	0.04 - 0.09 100%	Soil runoff	Yes	
<b>Microbial – No more than 5% of monthly samples can be positive. The highest monthly % positive is listed.</b>												
Coliform	% Positive	0	5%/Mo	0.7% June	ND	0.8% Sept	ND	4% Dec	ND	Naturally Occurring	Yes	
<b>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.</b>												
Chlorine Residual Entry Point	mg/L	4	4	1.1 (0.8 – 1.5)	0.8 (0.5 – 1.6)	0.8 (0.2 – 1.3)	1.0 (0.7 – 1.2)	1.4 (1.0 – 1.7)	1.0 (0.9 – 1.1)	Water additive used to control microbes	Yes	
Total THMs	ug/L	NA	80	41 (12 – 81)	NR	37 (24-57)	44 (22 – 66)	43 (24 -61)	42 (30 – 52)	By-product of water chlorination	Yes	
Haloacetic Acids (HAA5)	ug/L	NA	60	15 (6 – 40)	NR	21 (8 – 40)	22 (20 – 24)	27 (20 – 33)	13 (9 – 25)	By-product of water chlorination	Yes	
<b>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.</b>												
Copper (Customer Tap Samples)	mg/L	1.3	AL=1.3	0.232 None (2003)	0.388 None (2003)	0.140 None (2003)	0.008 none	0.388 None (2004)	0.106 None	Corrosion of household plumbing	Yes	
Lead (Customer Tap Samples)	ug/L	0	AL=15	8 One (2003)	3 None (2003)	7 None (2003)	2 None	3 None (2004)	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.

**MRDL** = Maximum Residual 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.

**pC/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

**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.**