W A T E R Q U A L I T Y D A T A

A summary of test results is provided in the table below. The majority of data in this table are from 2011. If after reading this report you need additional information or service, please feel free to call the City's water quality experts at 428-3647, or you may contact the Monroe County Health Department at 753-5469 during normal business hours. A complete list of test results for the Monroe County Water Authority can be found at their website: www.mcwa.com/watqlsum.htm

Terms and abbreviations used below:

 Maximum Contaminant Level (MCL): the highest level of a contaminant set that is allowed in drinking water. EPA sets MCLs as close to the MCLGs as feasible using the best available treatment technology.

 Action Level (AL): the concentration of a contaminant prescribed by the EPA, which when exceeded, triggers treatment or other requirements that a water system must follow.

 NTU: nephelometric turbidity units **ppm**: parts per million or milligrams per liter **ppb**: parts per billion or micrograms per liter **pCi/L**: picocurries per liter (a measure of radiation) **NA**: not applicable **ND:** not detected at testing limit

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
Inorganic contaminants							
Aluminum (ppb)	NA	1	6.4		4	32	26-35
Antimony (ppb)	6	1	ND		4	ND	
Arsenic (ppb)	50	1	ND		4	ND	
Barium (ppm)	2	1	0.017		4	0.021	0.020-0.022
Beryllium (ppb)	4	1	ND		4	ND	
Cadmium (ppb)	5	1	ND		4	ND	
Calcium (ppm)	NA	12	25	23-27	4	35	33-36
Chromium (ppb)	100	1	ND		4	ND	
Copper(ppb) (2009 data)	AL=1300	55	88 (=90%tile)	ND-200	51	55	ND-370
Cyanide (ppb)	200	1	ND		4	ND	
Fluoride (ppm)	2.2	772	0.83	0.00-1.28	2058	0.7	0.2-1.4
Iron (ppb)	300	1	ND		4	ND	
Lead (ppb) (2009 data)	AL=15	55	15 (=90%tile)	ND-42 (6 samples >15)	51	1.9	ND-8
Magnesium (ppm)	NA	1	6.3		4	9.1	8.6-9.7
Manganese (ppb)	300	1	ND		4		ND-2
Mercury	2	1	ND		4	ND	
Nickel (ppb)+++++++	100	1	1.4		4	ND	
Nitrate (ppm)	10	11	0.18	0.08-0.30	4	0.34	0.23-0.37
Nitrite (ppm)	1	1	ND		4	ND	
Potassium (ppm)	NA	1	1.4		1	1.6	
Selenium (ppb)	50	1	ND		4	ND	
Silver (ppb)	100	1	ND		4	ND	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
Sodium (ppm)	NA	1	19		4	ND	
Sulfate (ppm)	250	8	14	12-15	1	26	
Thallium (ppb)	2	1	ND		4	ND	
Zinc (ppb)	5000	1	ND		4	ND	
Alkalinity (ppm)	NA	23	67	65-72	4	86	83-87
Chlorides (ppm)	250	11	33	25-36	4	26	25-29
Color (Pt color unit)	15	8	ND		4	ND	
Specific Conductance (us/cm)	NA	20	277	271-285	34	300	
Dissolved solids (mg/L)	NA				4	175	160-190
pH (pH unit)	NA	360	7.7	7.0-8.0	363	7.3	7.2-7.5
Total Hardness (ppm)	NA	1	88		4	123	120-130
Total Organic Carbon (ppm)	NA	1	2.2		4	1.7	1.5-1.9
Surfactants (mg/L)	NA	1	ND		4	ND	
Turbidity – entry point (NTU)	**	2186	0.07	0.04-0.15	2190	0.05	0.04-0.09
Turbidity distribution system (NTU)	***	1837	0.15	0.02-17	4343	0.11	0.04-5.5
Chlorine residual – entry point (ppm)	****	2187	1.05	0.6-1.5	2190	1.1	0.8-1.5
Chlorine residual – distribution (ppm)	*****	1853	0.70	0.01-7.0	4343	0.6	0-2.2
Odor (threshold odor unit)	NA	3	2				
Coliform – entry point (% positive)	NA	360	0%				
Coliform – distribution system (% pos) [1]	5%	1880	0.6%	0-2.1%	4343	0.09%	
Asbestos (million fibers/L) (2009 data)	7	1	ND		1	ND	
Giardia (cysts/L)	NA	4	ND		4	ND	
Cryptosporidium (oocysts/L)	NA	4	ND		4	ND	
Benzene	5	1	ND		4	ND	
Bromobenzene	5	1	ND		4	ND	
Bromochloromethane	5	1	0.004		4	ND	
Bromomethane	5	1	ND		4	ND	
n-Butylbenzene	5	1	ND		4	ND	
Carbon tetrachloride	5	1	ND		4	ND	
Chlorobenzene	5	1	ND		4	ND	
Chloroethane	5	1	ND		4	ND	
Chloromethane	5	1	ND		4	ND	
2-Chlorotoluene	5	1	ND		4	ND	
4-Chlorotoluene	5	1	ND		4	ND	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
Dibormomethane	5	1	ND		4	ND	
1,2-Dichlorobenzene	5	1	ND		4	ND	
1,3-Dichlorobenzene	5	1	ND		4	ND	
1,4-Dichlorobenzene	5	1	ND		4	ND	
Dichlorodifluoromethane	5	1	ND		4	ND	
1,1-Dichloroethane	5	1	ND		4	ND	
1,2-Dichloroethane	5	1	ND		4	ND	
1,1-Dichloroethylene	5	1	ND		4	ND	
Cis-1,2-Dichloroethylene	5	1	ND		4	ND	
Trans-1,2-Dichloroethylene	5	1	ND		4	ND	
1,2-Dichloropropane	5	1	ND		4	ND	
1,3-Dichloropropane	5	1	ND		4	ND	
2,2-Dichloropropane	5	1	ND		4	ND	
1,1-Dichloropropene	5	1	ND		4	ND	
Cis-1,3-Dichloropropene	5	1	ND		4	ND	
Trans-1,3-Dichloropropene	5	1	ND		4	ND	
Ethyl benzene	5	1	ND		4	ND	
Hexachlorobutadiene	5	1	ND		4	ND	
Isopropylbenzene	5	1	ND		4	ND	
p-Isopropyltoluene	5	1	ND		4	ND	
Methylene chloride	5	1	ND		4	ND	
Naphthalene	NA	NA			4	ND	
n-Propylbenzene	5	1	ND		4	ND	
Styrene	5	1	ND		4	ND	
1,1,1,2-tetrachloroethane	5	1	ND		4	ND	
1,1,2,2-tetrachloroethane	5	1	ND		4	ND	
Tetrachloroethene	5	1	ND		4	ND	
Toluene	5	1	ND		4	ND	
1,2,3-Trichlorobenzene	5	1	ND		4	ND	
1,2,4-Trichlorobenzene	5	1	ND		4	ND	
1,1,1-Trichloroethane	5	1	ND		4	ND	
1,1,2-Trichloroethane	5	1	ND		4	ND	
Trichloroethene	5	1	ND		4	ND	
Trichlorofluoromethane	5	1	ND		4	ND	
1,2,3-Trichloropropane	5	1	ND		4	ND	
1,2,4-trimethylbenzene	5	1	ND		4	ND	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
1,3,5-trimethylbenzene	5	1	ND		4	ND	
Xylenes	5	1	ND		4	ND	
Vinyl chloride	5	1	ND		4	ND	
MTBE	NA	1	ND		4	ND	
1,2-Dibromo-3-Chloropropane	0.05	1	ND		1	ND	
1,2-Dibromoethane (EDB)	0.05	1	ND		1	ND	
2,4,5-TP (Silvex)	10	1	ND		1	ND	
2,4-D	50	1	ND		1	ND	
3-Hydroxycarbofuran	50	1	ND		1	ND	
Alachlor	2	1	ND		4	ND	
Aldicarb	3	1	ND		1	ND	
Aldicarb Sulfoxide	4	1	ND		1	ND	
Aldrin	50	1	ND		4	ND	
Atrazine	3	1	ND		4	ND	
Benzo(a)pyrene	0.2	1	ND		4	ND	
Bis(2-Ethylhexyl)Phthalate	6	1	ND		4	ND	
Butachlor	50	1	ND		4	ND	
Carbaryl	50	1	ND		1	ND	
Carbofuran	40	1	ND		1	ND	
Dalapon	50	1	ND		1	ND	
Bis(2-Ethylhexyl) Adipate	50	1	ND		1	ND	
Dicamba	50	1	ND		1	ND	
Dieldrin	50	1	ND		4	ND	
Dinoseb	7	1	ND		1	ND	
Dioxin	0.03	1	ND		1	ND	
Diquat	20	1	ND		1	ND	
Endothall	50	1	ND		4	ND	
Endrin	2	1	ND		1	ND	
Glyphosate	50	1	ND		1	ND	
Heptachlor	0.4	1	ND		4	ND	
Heptachlor Epoxide	0.2	1	ND		4	ND	
Hexachlorobenzene	1	1	ND		4	ND	
Hexachlorocyclopentadiene	50	1	ND		4	ND	
Lindane	0.2	1	ND		4	ND	
Methomyl	50	1	ND		4	ND	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
Methoxychlor	40	1	ND		4	ND	
Metolachlor	50	1	ND		4	ND	
Metribuzin	50	1	ND		4	ND	
Oxamyl	50	1	ND		4	ND	
PCB's Total	0.5	1	ND		4	ND	
Pentachlorophenol	1	1	ND		4	ND	
Pichloram	50	1	ND		1	ND	
Propachlor	50	1	ND		4	ND	
Simazine	4	1	ND		4	ND	
Total Chlordane	2	1	ND		4	ND	
Propylene glycol (2005)	1000	1	ND				
Toxaphene	3	1	ND		4	ND	
4,4'-DDT	NA	1	ND		4	ND	
Mirex	NA	1	ND		4	ND	
Disinfectant Byproducts (ppb)							
Total THMs	80	16	46	17-73	16	34	15-61
Total HAAs	60	16	32	6-48	16	12	4-26
TOX(2007)	NA	1	280				
Unregulated Contaminants Monitoring (ppb)(2002 data)							
2,4-dinitrotoluene	NA	3	ND				
2,6-dinitrotoluene		3	ND				
Acetochlor	NA	3	ND				
DCPA mono-acid degradate	NA	3	ND				
DCPA di-acid degradate	NA	3	ND				
4,4'-DDE	NA	3	ND				
EPTC	NA	3	ND				
Molinate	NA	3	ND				
Nitrobenzene	NA	3	ND				
Perchlorate	NA	3	ND				
Terbacil	NA	3	ND				
Unregulated Contaminants Monitoring Phase 2							
N-Nitrosodimethylamine	NA	4	ND				
N-nitrosomethyethyllamine	NA	4	ND				
N-nitrosodiethylamine	NA	4	ND				
N-nitrosodi-n-propylamine	NA	4	ND				
N-Nitrosopyrrolidine	NA	4	ND				

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
N-Nitrosodi-n-butylamine	NA	4	ND				
Acetochlor	NA	4	ND				
Alachlor	NA	4	ND				
Metolachlor	NA	4	ND				
Dimethoate	NA	4	ND				
Terbufos Sulfone	NA	4	ND				
PBDE 47	NA	4	ND				
PBDE 100	NA	4	ND				
PBDE 99	NA	4	ND				
2,2',4,4',5,5'-Hexabromobiphenyl	NA	4	ND				
PBDE 153	NA	4	ND				
RDX	NA	4	ND				
1,3-Dinitrobenzene	NA	4	ND				
2,4,6-Trinitrotoluene	NA	4	ND				
Acetochlor OA	NA	4	ND				
Acetochlor ESA	NA	4	ND				
Alachlor ESA	NA	4	ND				
Alachlor OA	NA	4	ND				
Metolachlor ESA	NA	4	ND				
Metolachlor OA	NA	4	ND				
Radionuclides (pCi/L)							
Gross alpha	15	2	ND		1(2003)	ND	
Total Uranium	NA	2	ND		4(2004)	ND	
Radium 226 & 228	50	2	ND		1(2003)	ND	
Taste and Odor Compounds							
Geosmin (ng/L******)	NA	1	3.5				
MIB (ng/L)	NA	1	1.4				

Table footnotes:

1) In 1993, the New York State Department of health granted the city what is known as a biofilm variance to the total coliform bacteria MCL. Biofilm refers to a layer of bacteria that can be found on water pipe surfaces. A biofilm variance is only allowed where the coliform bacteria recovered from a water system are identified as non-disease causing environmental strains originating from the pipeline biofilm and not from an external source of contamination. The city of Rochester is one of several large suppliers nationwide holding a biofilm variance.

** = 95% of measurements within a given month must be less than 0.5 ntu.
*** = Average of monthly distribution system samples must be less than 5.0 ntu.
****=Water entering the distribution must have a chlorine residual greater than 0.2 and less than 4 ppm.
*****=95% of monthly distribution system samples must have a measureable chlorine residual.
******=nanograms/liter or parts per trillion
Note: Total Hardness is also expressed in grains per gallon. The grains of hardness in the Ontario and Hemlock supplies are 7.6 & 5.6 respectively.