SHEBOYGAN WATER UTILITY

2022 Water Quality Analysis

Updated April 6, 2023

Explanation of units: since one gallon of water weighs 8.34 pounds, one million gallons of water weighs 8,340,000 pounds.
When 8.34 pounds of a pure substance is added to one million gallons of water the concentration would be one part per million.

parts per million (ppm) = milligrams per liter (mg/L) = 1 in 1,000,000
parts per billion (ppb) = micrograms per liter (ug/L) = 1 in 1,000,000,000
parts per trillion (ppt) = nanograms per liter (ng/L) = 1 in 1,000,000,000,000
parts per quadrillion (ppq) = picograms per liter (pg/L) = 1 in 1,000,000,000,000,000

Just how small are these terms in other units?

Unit =	1 part per million	1 part per billion	1 part per trillion	1 part per quadrillion
Length =	1 inch in 16 miles	1 inch in 16,000 miles	1 inch in 16,000,000 miles	1 inch in 16,000,000,000 miles
Time =	1 minute in 2 years	1 minute in 2,000 years	1 min. in 2,000,000 years	1 min. in 2,000,000,000 years
Money =	1 cent in $10,000	1 cent in $10,000,000	1 cent in $10,000,000,000	1 cent in $10,000,000,000,000

Important Water Terms:

Maximum Contaminant Level (MCL): Highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG): Level of a contaminant in drinking water below which there is no known or expected risk to health.

Turbidity: A measure of the clarity of water reported in Neophelometeric Turbidity Units (NTU's). Is just noticeable to the average person in excess of 5 NTU.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

No Standard (NS): The Environmental Protection Agency (EPA) has not determined standards for these substances.

Not Tested (NT): The constituent was not tested for.

Million Fibers per Liter (mfl): The measure of the presence of asbestos fibers that are longer than 10 micrometers.

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

MDL: Minimum detection level. Lowest amount that can be detected in the laboratory.

Not Applicable (NA): The test results vary with incoming water quality.

Results reported in less than (<) units indicate the amount of the chemical being tested for is "less than" the detection limit of the machines used to do the analysis.

Physical	**Date of Last Test**	**MCL**	**MCLG**	**Tap Water Results**	**Raw Water Results**
Temperature	continuous	NS	NS	**33 to 65 deg. F**	**33 to 65 deg. F**
pH	daily	6.5 to 8.5	NS	**average of 7.63**	**average of 8.27**
Color	continuous	15 Units	NS	< 1 color unit	**average of 5**
Total Residue	Monthly	NS	NS	**145 ppm**	NA
Turbidity	continuous	0.30 ntu	NS	**average of 0.060 NTU**	**average of 6.33 NTU**
Conductivity	continuous	NS	NS	**average of 83.67ns/cm @ 6.2 C°**	NT

II Inorganic

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Alkalinity, total CaCO3	daily	NS	NS	**average of 102 ppm**	**average of 112 ppm**
Aluminum (Al)	2006	.05-.2 ppm	NS	**.074 ppm**	NT
Antimony (Sb)	2022	6ppb	6ppb	<1.0 ppb	NT
Arsenic (As)	2022	10 ppb	n/a	<1.0 ppb	NT
Asbestos, Total	2003	7 mfl > 10 microns	7 mfl > 10 microns	<0.085	NT
Barium (Ba)	2022	2 ppm	2 ppm	**21 ppb**	NT
Beryllium (Be)	2022	4 ppb	4 ppb	<0.30 ppb	<300 ppt
Cadmium (Cd)	2022	5 ppb	5 ppb	<0.50 ppb	<200 ppt
Calcium (Ca)	2010	NS	NS	**34,000 ppb**	NT
Chloride (Cl), Total	1999	250,000 ppb	NS	**11,000 ppb**	NT
Chlorine, free Cl2	continuous	4,000 ppb	NS	**ave. of 0.890 ppm**	ND
Chromium (Cr), Total	2022	100 ppb	100 ppb	<0.90 ppb	NT
Copper (Cu)	2011	1,300 ppb	1,300 ppb	<20 ppb	NT
Cyanide, Total	1999	200 ppb	200 ppb	<10 ppb	NT
Fluoride (F)	continuous	4 ppm	4 ppm	**0.72 ppm**	**0.15 ppm**
Foaming Agents (MBAS)	2003	500 ppb	NS	<200 ppb	NT
Hardness, Total as CaCO3	monthly	NS	NS	**146 ppm**	NT
Iron (Fe)	2018	300 ppb	NS	**0.025 ppb**	NT
Lead (Pb)	2017	15 ppb	0	<1.0 ppb	NT
Magnesium (Mg), Total	1999	NS	NS	**11,000 ppb**	NT
Manganese (Mn)	2019	50,000 ppt	NS	**.695 ppt**	NT
Mercury (Hg)	2022	0.002 ppm	0.002 ppm	<0.10 ppb	<100 ppt
Nickel (Ni)	2022	0.01 ppm	0.01 ppm	<1.0 ppb	<1000 ppt
Nitrogen, NO3-N, Nitrate	2022	10 ppm	10 ppm	<0.010 ppm	NT
Nitrates, NO3 + NO2 (Total)	2022	10 ppm	10 ppm	**.23 ppm**	NT
Nitrogen, NO2-N, Nitrite	2017	1 ppm	1 ppm	<0.003 ppm	<10 ppb
Orthophosphate (as PO4)	Daily	NS	NS	**0.98 ppm**	NT
Selenium (Se)	2022	50 ppb	50 ppb	<2.0 ppb	<2 ppb
Silver (Ag)	1999	50 ppb	NS	<2.0 ppb	NT
Sodium (Na)	2022	500,000 ppb	NS	**10 ppm**	NT
Sulfate (SO4)	2022	250,000 ppb	NS	**27 ppm**	NT
Thallium (Tl)	2022	2 ppb	0.5 ppb	<0.30 ppb	<200 ppt
Zinc (Zn)	1999	5,000,000 ppt	NS	<5000 ppt	NT

III Disinfection By-Products

	Date of Last Test	MCL	MCLG		Tap Water Results	Raw Water Results
Total Trihalomethanes (TTHMs) :		80,000 ppt			Average of 4 samples	No Standard
Bromodichloromethane	2021	NS	0 ppt		**8,975 ppt**	NT
Bromoform	2021	NS	0 ppt		**435 ppt**	NT
Chloroform	2021	NS	0 ppt		**14,363 ppt**	NT
Dibromochloromethane	2021	NS	0 ppt		**4,113 ppt**	NT
		80,000 ppt		Total	**27,885 ppt**	No Standard
Total Haloacetic Acids (THAAs) :		60,000 ppt			Average of 4 samples	No Standard
Dibromoacetic Acid	2021	NS	0 ppt		**853 ppt**	NT
Dichloroacetic Acid	2021	NS	0 ppt		**5,888 ppt**	NT
Monobromoacetic Acid	2021	NS	0 ppt		<500 ppt	NT
Monochloroacetic Acid	2021	NS	0 ppt		<1,500 ppt	NT
Trichloroacetic Acid	2021	NS	0 ppt		**7,263 ppb**	NT
		60,000 ppt		Total	**14,003 ppt**	No Standard

IV Radioactivity

				MDL		
Gross Alpha	2009	15 pCi/l	0 pCi/l	2.3	0.18 +/- 1.22 pCi/L	NT
Gross Beta	2002	50 pCi/l	0 pCi/l	1.9	1.2 +/- 1.3 pCi/L	NT
Radium 226	2009	20 pCi/l	0 pCi/l	0.53	0.02 +/- 0.23 pCi/L	NT
Radium 228	2009	20 pCi/l	0 pCi/l	0.93	0.74 +/- 0.60	NT
Uranium Total	2008	30 pCi/l	0 pCi/l	1.00	0.12 +/- 0.10	NT

V Volatile Organic Compounds (VOCs)

Acetone	2019	NS	NS	**<2.8 ppb**	NT
Allyl Chloride	2019	NS	NS	<0.60 ppb	NT
Benzene	2019	5,000 ppt	1,000 ppt	<100 ppt	<500 ppt
Bromobenzene	2019	NS	NS	<100 ppt	<500 ppt
Bromochloromethane	2019	NS	NS	<100 ppt	<500 ppt
Bromodichloromethane	2019	NS	0 ppt	**8 ppb**	NT
Bromoform	2019	NS	NS	**<200 ppt**	NT
Bromomethane	2019	NS	NS	<400 ppt	<500 ppt
Butanone	2019	NS	NS	<2.9 ppb	NT
n-Butylbenzene	2019	NS	NS	<500 ppt	<500 ppt
sec-Butylbenzene	2019	NS	NS	<500 ppt	<500 ppt
tert_Butylbenzene	2019	NS	NS	<500 ppt	<500 ppt
Carbon disulfide	2019	NS	NS	<.37 ppb	NT
Carbon Tetrachloride	2019	5,000 ppt	0 ppt	<100 ppt	<500 ppt
Chlorobenzene	2019	100,000 ppt	100,000 ppt	<500 ppt	<500 ppt
Chlorethane	2019	NS	NS	<200 ppt	<500 ppt

V Volatile Organic Compounds (VOCs) continued

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Chloroform	2019	NS	NS	**19.0 ppb**	NT
Chloromethane	2019	NS	NS	<200 ppt	<500 ppt
Chloroethylvinyl ether	2019	NS	NS	< 1.0 ppb	NT
2-Chlorotoluene (o-)	2019	NS	NS	<100 ppt	<500 ppt
4-Chlorotoluene (p-)	2019	NS	NS	<100 ppt	<500 ppt
Dibromomethane	2019	5,000 ppt	NS	<100 ppt	<500 ppt
Dibromochloromethane	2019	NS	NS	**3.2 ppb**	NT
1,2- Dibromo-3-chloropropane	2019	NS	NS	<1.8 ppb	NT
Dichloromethane (DCM)	2019	5,000 ppt	0 ppt	<200 ppt	<500 ppt
1, 3-Dichlorobenzene (m-)	2019	NS	NS	<100 ppt	<500 ppt
1, 2-Dichlorobenzene (o-)	2019	600 ppb	600 ppb	<100 ppt	<500 ppt
1, 4-Dichlorobenzene (p-)	2019	75 ppb	75 ppb	<100 ppt	<500 ppt
Dichlorodifluoromethane	2019	NS	NS	<200 ppt	<500 ppt
1,1-Dichloroethane	2019	NS	NS	<200 ppt	<500 ppt
1,2-Dichloroethane	2019	5,000 ppt	0 ppt	<100 ppt	<500 ppt
1, 1-Dichloroethylene	2019	7,000 ppt	7,000 ppt	<100 ppt	<500 ppt
1, 2-Dichloroethylene, cis	2019	70,000 ppt	70,000 ppt	<100 ppt	<500 ppt
1, 2-Dichloroethylene, trans	2019	100,000 ppt	100,000 ppt	<500 ppt	<500 ppt
1, 2-Dichloropropane	2019	5,000 ppt	0 ppt	<100 ppt	<500 ppt
1, 3-Dichloropropane	2019	NS	NS	<100 ppt	<500 ppt
1, 1-Dichloropropene	2019	NS	NS	<300 ppt	<500 ppt
2, 2-Dichloropropane	2019	NS	NS	<100 ppt	<500 ppt
1,1-Dichloropropylene	2019	NS	NS	<300 ppt	<500 ppt
1,3-Dichloropropylene, cis	2019	NS	NS	<100 ppt	<500 ppt
1,3-Dichloropropylene trans	2019	NS	NS	<100 ppt	<500 ppt
1, 3-Dichloropropene	2019	NS	NS	<500 ppt	<500 ppt
Diethyl ether	2019	NS	NS	<1.5 ppb	NT
Diisopropyl ether	2019	NS	NS	<1.9 ppb	NT
Ethylbenzene	2019	700,000 ppt	700,000 ppt	<100 ppt	<500 ppt
Hexachlorobutadiene	2019	NS	NS	<100 ppt	<500 ppt
Hexane	2019	NS	NS	<1.7 ppb	NT
Hexanone	2019	NS	NS	<1.7 ppb	NT
Isopropylbenzene	2019	NS	NS	<100 ppt	<500 ppt
4-Isopropyltluene	2019	NS	NS	<100 ppt	<500 ppt
Methyl-t-butyl ether (MTBE)	2019	NS	NS	<200 ppt	<500 ppt
Methylnaphthalene	2019	NS	NS	<3.6 ppb	NT
Methyl-2-pentanone	2019	NS	NS	<1.5 ppb	NT
Methylene Chloride	2019	NS	NS	<0.58 ppb	NT
Naphthalene	2019	NS	NS	<300 ppt	<500 ppt
Chlorobenzene	2019	100,000 ppt	100,000 ppt	<100 ppt	NT
n-Propylbenzene	2019	NS	NS	<100 ppt	<500 ppt
Styrene	2019	100,000 ppt	100,000 ppt	<200 ppt	<500 ppt
Tetrahydrofuran	2019	NS	NS	<2.3 ppb	NT
1,1,1, 2-Tetrachloroethane	2019	NS	NS	<100 ppt	<500 ppt

V Volatile Organic Compounds (VOCs) continued

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
1,1,2-Trichlorotrifluoroethane	2019	NS	NS	<.54 ppb	NT
1,1,2, 2-Tetrachloroethane	2019	NS	NS	<100 ppt	<500 ppt
Tetrachloroethylene (PCE)	2019	5,000 ppt	0 ppt	<300 ppt	<500 ppt
Toluene	2019	1,000,000 ppt	1,000,000 ppt	<100 ppt	<500 ppt
1,2, 3-Trichlorobenzene	2019	NS	NS	<300 ppt	<500 ppt
1,2, 4-Trichlorobenzene	2019	70,000 ppt	70,000 ppt	<300 ppt	<500 ppt
1,1, 1-Trichloroethane	2019	200,000 ppt	200,000 ppt	<100 ppt	<500 ppt
1,1, 2-Trichloroethane	2019	5,000 ppt	3,000 ppt	<100 ppt	<500 ppt
Trichloroethylene (TCE)	2019	5,000 ppt	0 ppt	<200 ppt	<500 ppt
Trichloroethene	2019	NS	NS	<0.26 ppb	NT
Trichlorofluromethane	2019	NS	NS	<100 ppt	<500 ppt
1,2, 3-Trichloropropane	2019	NS	NS	<100 ppt	<500 ppt
1,2,4-Trimethylbenzene	2017	NS	NS	<100 ppt	<500 ppt
1,2,5-Trimethylbenzene	2017	NS	NS	<100 ppt	<500 ppt
1,3,5-Trimethylbenzene	2019	NS	NS	<100 ppt	NT
Vinyl Chloride	2019	200 ppt	0 ppt	<200 ppt	<200 ppt
Xylene, Total	2019	10,000,000 ppt	10,000,000 ppt	<100 ppt	<500 ppt
m(1,3) & p(1,4) Xylene	2019	NS	NS	<200 ppt	<500 ppt
o(1,2)-Xylene	2019	NS	NS	<100 ppt	<500 ppt

VI Synthetic Organic Compounds (SOCs) and Pesticides, Herbicides and PCBs

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Alachlor (Lasso)	2017	2,000 ppt	0 ppt	<10 ppt	<200 ppt
Aldicarb, Total	2017	3,000 ppt	NS	<100 ppt	<500 ppt
Aldicarb Sulfone	2017	2,000 ppt	NS	<100 ppt	<400 ppt
Aldicarb Sulfoxide	2017	4,000 ppt	NS	<100 ppt	<500 ppt
Aldrin	2017	NS	NS	<10 ppt	<100 ppt
Atrazine	2017	3,000 ppt	3,000 ppt	**0.04 ppb**	<100 ppt
Benzo(a)pyrene (PAHs)	2002	200 ppt	0 ppt	<20 ppt	NT
Butachlor	2017	NS	NS	<10 ppt	<100 ppt
Carbaryl	2017	NS	NS	<100 ppt	<100 ppt
Carbofuran	2017	40,000 ppt	40,000 ppt	<10 ppt	<900 ppt
Chlordane alpha	1994	NS	NS	<100 ppt	NT

VI Synthetic Organic Compounds (SOCs) and Pesticides, Herbicides and PCBs continued

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Chlordane gamma	1994	NS	NS	<100 ppt	NT
Chlordane	2011	2,000 ppt	0 ppt	<100 ppt	<100 ppt
2, 4-D	2017	70,000 ppt	70,000 ppt	<100 ppt	<100 ppt
Dalapon	2017	200 ppb	200 ppb	**0.37 ppb**	<1.0 ppb
1, 2-Dibromo-3-chloropropane (DBCP)	2011	200 ppt	0 ppt	<20 ppt	NT
Dicamba	2017	NS	NS	<100 ppt	<100 ppt
Dieldrin	2017	NS	NS	<20 ppt	<100 ppt
Di (2-ethylhexyl) adipate	2017	400,000 ppt	400,000 ppt	<600 ppt	NT
Di (2-ethylhexyl) phthalate	2017	6,000 ppt	0 ppt	<600 ppt	NT
2,3,7, 8-TCDD (Dioxin)	2014	30 ppq	0 ppq	<0.5 ppq	NT
Dinoseb	2017	7,000 ppt	7,000 ppt	<70 ppt	<100 ppt
Diquat	2017	20,000 ppt	20,000 ppt	<300 ppt	<400 ppt
Endothall	2017	100 ppb	100 ppb	<4.0 ppb	<9.0 ppb
Endrin	2017	2,000 ppt	2,000 ppt	<10 ppt	<10 ppt
Ethylene dibromide (EDB)	2011	50 ppt	0 ppt	<20 ppt	NT
Glyphosate (Round-up)	2017	700 ppb	700 ppb	<4.0 ppb	<6.0 ppb
Heptachlor	2017	400 ppt	0 ppt	<10 ppt	<40 ppt
Heptachlor epoxide	2017	200 ppt	0 ppt	<10 ppt	< 20 ppt
Hexachlorobenzene	2017	1,000 ppt	0 ppt	<10 ppt	<100 ppt
Hexachlorocyclopentadiene (HEX)	2017	50,000 ppt	50,000 ppt	**0.02 ppb**	<100 ppt
3-Hydroxycarbofuran	2017	40 ppb	40 ppb	<0.1 ppb	<1.0 ppb
BHC Gamma (Lindane)	2017	200 ppt	200 ppt	<10 ppt	<20 ppt
Methoxychlor	2017	40,000 ppt	40,000 ppt	<100 ppt	<100 ppt
Methomyl	2017	NS	NS	<10 ppt	<500 ppt
Metolachlor (Dual)	2017	NS	NS	<10 ppt	<100 ppt
Metribuzin (Sencor)	2011	NS	NS	<10 ppt	<100 ppt
Oxamyl (Vydate)	2011	200 ppb	200 ppb	<0.1 ppb	<1.0 ppb
Pentachlorophenol	2011	1,000 ppt	0 ppt	<10 ppt	<40 ppt
Picloram (Tordon)	2011	500,000 ppt	500,000 ppt	<30 ppt	<100ppt
Propachlor	2011	NS	NS	<10 ppt	<100 ppt
2,4, 5-TP (Silvex)	2011	50,000 ppt	50,000 ppt	<70 ppt	<100 ppt
Simazine	2011	4,000 ppt	4,000 ppt	<20 ppt	<70 ppt
Toxaphene	2011	3 ppb	0 ppb	<0.9 ppb	<1.0 ppb

VI Synthetic Organic Compounds (SOCs) and Pesticides, Herbicides and PCBs continued

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Polychlorinated Biphenyls (PCBs) :		500 ppt	0 ppt		
Aroclor 1016	2017	500 ppt	0 ppt	<800 ppt	<800 ppt
Aroclor 1232	2017	500 ppt	0 ppt	<230 ppt	<230 ppt
Aroclor 1248	2017	500 ppt	0 ppt	<100 ppt	<100 ppt
Aroclor 1260	2017	500 ppt	0 ppt	<200 ppt	<200 ppt
Aroclor 1221	2017	500 ppt	0 ppt	<190 ppt	<190 ppt
Aroclor 1242	2017	500 ppt	0 ppt	<260 ppt	<260 ppt
Aroclor 1254	2017	500 ppt	0 ppt	<100 ppt	<100 ppt

VII Microbiological Contaminants

MCL: No more than 5% of the 50 monthly Tap samples can be Total Coliform Positive.

Bacteria:	MCLG	2022 Tap Water Results	2021 Raw Water Results
Total Coliform Positive	0.00%	0.0 in 966 tests	302 in 366 tests
Escherichia Coliforms (E. coli.) Positive	0.00%	0.0 in 966 tests	89 in 366 tests

Pathogenic Protoza:	MCL	MCLG	2022 Tap Water Results	2021 Raw Water Results
Crpytosporidium parvum	0	0	0 in 12 tests	0 in 12 tests
Giardia lambia	0	0	0 in 12 tests	0 in 12 tests

VIII Unregulated Contaminants

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Acetochlor (herbicide)	2009	NS	NS	<1.0 ppb	<1.0 ppb
2,4-Dinitrotoluene (explosives)	2002	NS	NS	<2.0 ppb	<2.0 ppb
2,6-Dinitrotoluene (explosives)	2002	NS	NS	<2.0 ppb	<2.0 ppb
DCPA acid metaolites (herbicide)	2002	NS	NS	<1.0 ppb	<1.0 ppb
4,4'-DDE (insecticide)	2002	NS	NS	<0.8 ppb	<0.8 ppb
EPTC (herbicide)	2002	NS	NS	<1.0 ppb	<1.0 ppb
Molinate (herbicide)	2002	NS	NS	<0.9 ppb	<0.9 ppb
MTBE (gasoline additive)	2002	NS	NS	<5.0 ppb	<5.0 ppb
Nitrobenzene (dyes, drugs, herbi.)	2002	NS	NS	<10 ppb	<10 ppb
Terbacil (herbicide)	2002	NS	NS	<2.0 ppb	<2.0 ppb
Perchlorate (solid fuel rockets)	2002	NS	NS	<4.0 ppb	<4.0 ppb

IX UMCR2 Assessment Monitoring

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Dimethoate	2010	NS	NS	<0.7 ppb	NT
2,2',4,4',5,5'-Hexambromobipheny (HBB)	2010	NS	NS	<0.7 ppb	NT
2,2',4,4',5,5'-Hexambromobipheny ether (BDE-153)	2010	NS	NS	<0.8 ppb	NT
2,2',4,4',5-Pentabromobipheny ether (BDE-99)	2010	NS	NS	<0.9 ppb	NT
2,2',4,4',6-Pentabromobipheny ether (BDE-100)	2010	NS	NS	<0.5 ppb	NT
Terbufos-sulfone	2010	NS	NS	<0.4 ppb	NT
2,2',4,4'-Tetrabromodiphenyl ether (BDE-47)	2010	NS	NS	<0.3 ppb	NT
1,3-Dinitrobenzene	2010	NS	NS	<0.8 ppb	NT
RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)	2010	NS	NS	<1.0 ppb	NT
TNT (2,4,6-Trinitrotoluene)	2010	NS	NS	<0.8 ppb	NT

X UMCR2 Screening Survey

	Date of Last Test	MCL	MCLG	Tap Water Results	Distribution System Results
N-Nitrosodiethylamine (NDEA)	2010	NS	NS	<0.0050 ppb	<0.0050 ppb
N-Nitrosodimethylamine (NDMA)	2010	NS	NS	<0.0020 ppb	<0.0020 ppb
N-Nitrosodi-N-butylamine (NDBA)	2010	NS	NS	<0.0040 ppb	<0.0040 ppb
N-Nitrosodi-N-propylamine (NDPA)	2010	NS	NS	<0.0070 ppb	<0.0070 ppb
N-Nitrosomethylethylamine (NMEA)	2010	NS	NS	<0.0030 ppb	<0.0030 ppb
N-Nitrosopyrrolidine (NPYR)	2010	NS	NS	<0.0020 ppb	<0.0020 ppb
Acetochlor ESA	2010	NS	NS	<1.0 ppb	NT
Acetochlor OA	2010	NS	NS	<2.0 ppb	NT
Alachlor ESA	2010	NS	NS	<1.0 ppb	NT
Alachlor OA	2010	NS	NS	<2.0 ppb	NT
Metolalchlor ESA	2010	NS	NS	<1.0 ppb	NT
Metolachlor OA	2010	NS	NS	<2.0 ppb	NT

XI Pharmaceutically Active Compounds

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Acetaminophen	2017	NS	NS	<0.005 ppb	NT
Acesulfame-K	2017	NS	NS	**0.16 ppb**	NT
Antipyrine	2017	NS	NS	<0.001 ppb	NT
Atenolol	2017	NS	NS	<0.001 ppb	NT
Azithromycin	2017	NS	NS	<0.005 ppb	NT
Bacitracin	2011	NS	NS	<1.0 ppb	NT
Bezafibrate	2017	NS	NS	<0.0005 ppb	NT
Caffeine	2017	NS	NS	<0.05 ppb	NT
Carbadox	2017	NS	NS	<0.005 ppb	NT
Carbamazepine	2017	NS	NS	<0.001 ppb	NT
Chloramphenicol	2017	NS	NS	<0.005 ppb	NT
Chlorotetracycline	2017	NS	NS	<0.005 ppb	NT
Ciprofloxacin	2017	NS	NS	<0.05 ppb	NT
Clofibric acid	2017	NS	NS	<0.0005 ppb	NT
Cotinine	2017	NS	NS	**0.002 ppb**	NT
DEET	2017	NS	NS	**0.008 ppb**	NT
Dexamethasone	2017	NS	NS	<0.005 ppb	NT
Diazepam	2017	NS	NS	<0.001 ppb	NT
Diclofenac	2017	NS	NS	<0.0005 ppb	NT
Dilantin	2017	NS	NS	<0.002 ppb	NT
Diltiazem	2017	NS	NS	<0.0001 ppb	NT
Doxycycline	2017	NS	NS	<0.05 ppb	NT
Enrofloxacin	2017	NS	NS	<0.05 ppb	NT
Erythromycin	2017	NS	NS	<0.001 ppb	NT
Fluoxetine (Prozac)	2017	NS	NS	<0.001 ppb	NT
Gemfibrozil	2017	NS	NS	<0.0005 ppb	NT
Ibuprofen	2017	NS	NS	<0.05 ppb	NT
Iopromide	2017	NS	NS	<0.05 ppb	NT
Lasalocid	2017	NS	NS	<0.001 ppb	NT
Levothyroxine (Synthroid)	2017	NS	NS	<0.002 ppb	NT
Lincomycin	2017	NS	NS	<0.0001 ppb	NT
Meprobamate	2017	NS	NS	<0.001 ppb	NT

XI Pharmaceutically Active Compounds continued

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Monensin	2017	NS	NS	**0.001ppb**	NT
Naproxen	2017	NS	NS	<0.002 ppb	NT
Narasin	2017	NS	NS	<0.001 ppb	NT
Nicotine	2017	NS	NS	<0.005 ppb	NT
Norfloxacin	2017	NS	NS	<0.05 ppb	NT
Oleandomycin	2017	NS	NS	<0.001 ppb	NT
Oxytetracycline	2017	NS	NS	<0.05 ppb	NT
Paraxanthine	2017	NS	NS	<0.005 ppb	NT
Penicillin G	2017	NS	NS	<0.002 ppb	NT
Pencillin V	2017	NS	NS	<0.002 ppb	NT
Prednisone	2017	NS	NS	<0.002 ppb	NT
Primidone	2017	NS	NS	<0.005 ppb	NT
Roxithromycin	2017	NS	NS	<0.001 ppb	NT
Salicylic acid	2017	NS	NS	<0.05 ppb	NT
Salinomycin	2017	NS	NS	<0.0001 ppb	NT
Simvastatin	2017	NS	NS	<0.005 ppb	NT
Sulfachloropyridazine	2017	NS	NS	<0.005 ppb	NT
Sulfadiazine	2017	NS	NS	<0.001 ppb	NT
Sulfadimethoxine	2017	NS	NS	<0.0001 ppb	NT
Sulfamerazine	2017	NS	NS	<0.001 ppb	NT
Sulfamethazine	2017	NS	NS	<0.001 ppb	NT
Sulfamethizole	2017	NS	NS	<0.001 ppb	NT
Sulfamethoxazole	2017	NS	NS	<0.001 ppb	NT
Sulfasalazine	2017	NS	NS	<0.005 ppb	NT
Sulfathiazole	2017	NS	NS	<0.001 ppb	NT
Sucralose	2017	NS	NS	**0.038 ppb**	NT
Tetracycline	2017	NS	NS	<0.5 ppb	NT
Theobromine	2017	NS	NS	<0.05 ppb	NT
Thephylline	2017	NS	NS	<0.005 ppb	NT
Triclocarban	2017	NS	NS	<0.005 ppb	NT
Triclosan	2017	NS	NS	<0.05 ppb	NT
Trimethoprim	2017	NS	NS	<0.001 ppb	NT
Tylosin	2017	NS	NS	<0.001 ppb	NT
Tris(2-chloroethyl) phosphate	2017	NS	NS	<0.01 ppb	NT
Tris(chloroethyl) phosphate	2017	NS	NS	**0.01 pbb**	NT
Virginiamycin M1	2017	NS	NS	<0.001 ppb	NT

XII UMCR3 Assessment Monitoring

	Date of Last Test	MCL	MCLG	Range	Tap Water Results Average of samples	Distribution System Results Average of samples
Chromium	2014	100 ppb	100 ppb	<.2-.2 ppb	**.25 ppb**	**.2 ppb**
Cobalt	2014	NS	NS		< 1 ppb	< 1 ppb
Molybdenum	2014	NS	NS	<1-1 ppb	**1 ppb**	**1 ppb**
Strontium	2014	NS	NS	110-120 ppb	**125 ppb**	**120 ppb**
Vanadium	2014	NS	NS	.3 ppb	**.3 ppb**	**.3 ppb**
Chromium, Hexavalent	2014	NS	NS	.19-.20 ppb	**.21 ppb**	**0.2 ppb**
Chlorate	2014	NS	NS	65-140 ppb	**46 ppb**	**54 ppb**
1,4-Dioxane	2014	NS	NS		< .07 ppb	NT
Bromochloromethane	2014	NS	NS		< .06 ppb	NT
Bromomethane	2014	NS	NS		< .2 ppb	NT
1,3-Butadiene	2014	NS	NS		< .1 ppb	NT
Chlorodifluoromethane	2014	NS	NS		< .08 ppb	NT
Chloromethane	2014	NS	NS		< .2 ppb	NT
1,1-Dichloroethane	2014	NS	NS		< .03 ppb	NT
1,2,3-Trichloropropane	2014	NS	NS		< .03 ppb	NT
Perfluorobutanesulfonic acid (PFBS)	2014	NS	NS		< .09 ppb	NT
Perfluoroheptanoic acid (PFHpA)	2014	NS	NS		< .01 ppb	NT
Perfluorohexanesulfonic acid (PFHxS)	2014	NS	NS		< .03 ppb	NT
Perfluorononanoic acid (PFNA)	2014	NS	NS		< .02 ppb	NT
Perfluorooctanesulfonic acid (PFOS)	2014	NS	NS		< .04 ppb	NT
Perfluorooctanoic acid (PFOA)	2014	NS	NS		<.02 ppb	NT

XIII UMCR4 Assessment Monitoring

	Date of Last Test	MCL	MCLG	MRL	Tap Water Results Average of Samples	Distribution System Results Average of Samples
Alpha-Hexachlorocyclohexane	2019	NS	NS	0.01 ppb	< 0.01 ppb	< 0.01 ppb
Anatoxin-a	2019	NS	NS	0.03 ppb	< 0.03 ppb	< 0.03 ppb
Bromide	2019	NS	NS	20 ppb	**35.7 ppb**	**30.6 ppb**
Butanol	2019	NS	NS	2 ppb	< 2.0 ppb	NT
Butylated hydroxyanisole	2019	NS	NS	0.03 ppb	< 0.03 ppb	NT
Chlorpyrifos	2019	NS	NS	0.03 ppb	< 0.03 ppb	NT
Cis-Permethrin	2019	NS	NS	0.019 ppb	< 0.019 ppb	NT
Cylindrospermopsin	2019	NS	NS	0.09 ppb	< 0.09 ppb	NT
Dimethipin	2019	NS	NS	0.2 ppb	< 0.2 ppb	NT
Ethoprop	2019	NS	NS	0.03 ppb	< 0.03 ppb	NT
Germanium	2019	NS	NS	0.3 ppb	< 0.3 ppb	NT
Manganese	2019	NS	NS	0.4 ppb	**0.695 ppb**	**0.695 ppb**
Methoxyethanol	2019	NS	NS	0.4 ppb	< 0.4 ppb	NT
Neodymium-143	2019	NS	NS	10000 cps	< 10000 cps	NT
O-Toluidine	2019	NS	NS	0.007 ppb	< 0.007 ppb	NT
Oxyfluorfen	2019	NS	NS	0.05 ppb	< 0.05 ppb	NT
Permethrin, cis & trans	2019	NS	NS	0.04 ppb	< 0.04 ppb	NT
Profenofos	2019	NS	NS	0.3 ppb	< 0.3 ppb	NT
Propen-1-ol	2019	NS	NS	0.5 ppb	< 0.5 ppb	NT
Quinoline	2019	NS	NS	0.02 ppb	< 0.02 ppb	NT
Samarium-147	2019	NS	NS	10000 cps	< 10000 cps	NT
Tebuconazole	2019	NS	NS	0.2 ppb	< 0.2 ppb	NT
Total Microcystins & Nodularins	2019	NS	NS	0.3 ppb	< 0.3 ppb	NT
Total Organic Carbon (TOC)	2021	NS	NS	1 mg/L	**1.55 mg/L**	**1.75 mg/L**
trans-Permethrin	2019	NS	NS	0.029 ppb	< 0.029 ppb	NT
Tribufos	2019	NS	NS	0.07 ppb	< 0.07 ppb	NT

XIV PFAS Compounds

	Date of Last Test	MCL	MCLG	Tap Water Results	Raw Water Results
Perfluorooctanoic acid (PFOA)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluorooctanesulfonic acid (PFOS)	2021	NS	NS	**2.3 ppt**	**2.0 ppt**
Perfluorobutanesulfonic acid (PFBS)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluoroheptanoic acid (PFHpA)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluorohexanesulfonic acid (PFHxS)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluorononanoic acid (PFNA)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluorodecanoic acid (PFDA)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluorohexanoic acid (PFHxA)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluorododecanoic acid (PFDoA)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluorotridecanoic acid (PFTrDA)	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluoroundecanoic acid (PFUnA)	2021	NS	NS	<2.0 ppt	<2.0 ppt
N-ethyl Perfluorooctanesulfonamidoacetic acid	2021	NS	NS	<2.0 ppt	<2.0 ppt
N-methyl Perfluorooctanesulfonamidoacetic acid	2021	NS	NS	<2.0 ppt	<2.0 ppt
HFPO-DA/GenX	2021	NS	NS	<2.0 ppt	<2.0 ppt
ADONA	2021	NS	NS	<2.0 ppt	<2.0 ppt
9Cl-PF3ONS/F-53B Major	2021	NS	NS	<2.0 ppt	<2.0 ppt
11Cl-PF3OUdS/F-53B Minor	2021	NS	NS	<2.0 ppt	<2.0 ppt
Perfluorotetradecanoic acid (PFTeDA)	2021	NS	NS	<2.0 ppt	<2.0 ppt

XV Lead and Copper

	Date of Last Test	MCL (Action Level)	MCLG	Distribution System 90th Percentile Results
Lead	2020	15 ppb	0	**4.0 ppb**
Copper	2020	1300 ppb	1300 ppb	**27 ppb**