Milwaukee Water Works

Safe, Abundant Drinking Water.

Annual Water Quality Report 2009

Tests of Finished Water from the Treatment Plants

The Milwaukee Water Works fully complies with all Federal and State drinking water quality regulations.

		ALLOWABLE CONCENTRATION (MCL, mg/L)	MAXIMUM (mg/L)	MINIMUM (mg/L)	MEDIAN (mg/L)
Clarity					
Turbidity , NTU '	95% of the time	<0.3	0.08	0.03	0.04
Microbiological					
Coliform, Total, Presence in 100mL '		<5%	<1	<1	<1
Cryptosporidium parvum, oocysts/100L*		TT	<0.200	<0.190	<0.200
Giardia lamblia, cysts/100L**		TT	<0.200	<0.190	<0.200
Heterotrophic Plate Count, cfu/1mL '		NR	13.5	<1	<1
Chemical & Physical Parameters					
Alkalinity, as CaCO3 '		NR	110	93	98
Carbon dioxide, free (calculated)		NR	7.31	3.04	5.35
Conductivity, uS/cm		NR	408	285	303
Hardness, Total, as CaCO3		NR	150	127	134
Hardness, Calcium, as CaCO3		NR	130	86	95
Hardness, Magnesium, as CaCO3		NR	47	11	39
Odor (Threshold Odor Number) '		3	1	1	1
pH '		6.5-8.5	7.87	7.30	7.57
Saturation Index (calculated)		NR	-0.10	-0.73	-0.45
Specific UV absorbance, L/mg-M, calc.		NR	1.6	0.7	1.1
Temperature, degrees Celsius '		NR	22.8	-0.2	9.2
Total Dissolved Solids (TDS) calc.		500	237	165	176
Total Solids		NR	220	165	160
Total Suspended Solids		NR	<10	<10	<10
Total Organic Carbon		NR	2.6	1.0	1.3
UV-254 (cm-1)		NR	0.021	0.013	0.015
Inorganic Chemicals					
Aluminum		0.2 (S)	0.309	<0.003	0.045
Ammonia, as Nitrogen		NR	0.3	<0.1	0.20
Antimony		0.006	<0.001	<0.001	<0.001
Arsenic		0.010	<0.002	<0.002	<0.002
Barium		2	0.021	0.019	0.021
Beryllium		0.0004	<0.0003	<0.0003	<0.0003

Boron	NR	0.026	0.023	0.024
Bromate	NR	0.009	<0.002	0.004
Bromide	NR	0.027	0.012	0.018
Cadmium	0.005	<0.001	<0.001	<0.001
Calcium	NR	39.0	33.0	35.0
Cerium	NR	<0.001	<0.001	<0.001
Cesium	NR	<0.001	<0.001	<0.001
Chlorate	NR	0.155	0.042	0.088
Chloride	250	33.5	12.5	13.5
Chlorine, Free	4	0.14	0.00	0.04
Chlorine, Total	4	1.95	1.04	1.40
Chlorite	1	<0.005	<0.005	<0.005
Chromium	0.1	<0.002	<0.002	<0.002
Cobalt	NR	<0.001	<0.001	<0.001
Copper	NR at plant, see note	<0.002	<0.002	<0.002
Cyanide	0.2	<0.020	<0.020	<0.020
Dysprosium	NR	<0.001	<0.001	<0.001
Erbium	NR	<0.001	<0.001	<0.001
Europium	NR	<0.001	<0.001	<0.001
Fluoride	4.0	2.06	0.11	0.77
Gadolinium	NR	<0.001	<0.001	<0.001
Gallium	NR	<0.001	<0.001	<0.001
Germanium	NR	<0.001	<0.001	<0.001
Gold	NR	<0.001	<0.001	<0.001
Hafnium	NR	<0.001	<0.001	<0.001
Holmium	NR	<0.001	<0.001	<0.001
Iridium	NR	<0.001	<0.001	<0.001
Iron	0.3 (S)	0.018	<0.003	<0.003
Lanthanum	NR	<0.001	<0.001	<0.001
Lead	NR at plant, see note	<0.002	<0.002	<0.002
Lithium	NR	0.0026	0.0019	0.0021
Lutetium	NR	0.0043	0.0033	0.0036
Magnesium	NR	14	12	12
Manganese	0.05	0.0015	<0.0005	<0.0005
Mercury	0.002	<0.0001	<0.0001	<0.0001
Molybdenum	NR	<0.002	<0.002	<0.002
Neodymium	NR	<0.001	<0.001	<0.001
Nickel	0.1	<0.001	<0.001	<0.001
Niobium	NR	<0.001	<0.001	<0.001
Nitrate, as Nitrogen	10	0.500	0.200	0.250
Nitrate and Nitrite, Total, as Nitrogen	10	0.500	0.200	0.250
Nitrite, as Nitrogen	1	<0.010	<0.010	<0.010
Nitrogen, Kjeldahl	NR	0.500	<0.500	<0.500
Osmium	NR	0.001	<0.001	<0.001
Palladium	NR	0.014	<0.010	0.011
Perchlorate	NR	0.00013	0.00012	0.00013
ortho-phosphate	NR	3.18	0.02	1.88
Phosphorus	NR	0.710	0.510	0.660
Platinum	NR	<0.001	<0.001	<0.001
Potassium	NR	1.6	0.8	1.4
Praseodymium	NR	<0.001	<0.001	<0.001
Protactinium	NR	<0.001	<0.001	<0.001
Rhenium	NR	<0.001	<0.001	<0.001
Rhodium	NR	<0.001	<0.001	<0.001
Rubidium	NR	0.0016	0.0012	0.0013

Ruthenium	NR	<0.001	<0.001	<0.001
Samarium	NR	<0.001	<0.001	<0.001
Selenium	0.05	<0.002	<0.002	<0.002
Silicon	NR	4.80	1.90	3.15
Silver	0.05	<0.0005	<0.0005	<0.0005
Sodium	NR	17.30	6.65	9.27
Strontium	NR	0.150	0.110	0.115
Sulfate	500 (P)	32.4	26.7	28.3
Tantalum	NR	<0.001	<0.001	<0.001
Tellurium	NR	<0.001	<0.001	<0.001
Thallium	0.002	<0.0004	<0.0004	<0.0004
Thorium	NR	<0.002	<0.002	<0.002
Thulium	NR	<0.001	<0.001	<0.001
Tin	NR	<0.005	<0.005	<0.005
Titanium	NR	0.0024	<0.0010	0.0013
Tungsten	NR	<0.001	<0.001	<0.001
Uranium	NR	<0.001	<0.001	<0.001
Vanadium	NR	0.0033	<0.0010	0.0019
Ytterbium	NR	<0.001	<0.001	<0.001
Zinc	5	<0.005	<0.005	<0.005
Zirconium	NR	0.0021	<0.0010	0.0015

Organic Chemicals

Acenaphthene	NR	<0.0001	<0.0001	<0.0001
Acenaphthylene	NR	<0.0001	<0.0001	<0.0001
Acetaldehyde	NR	<0.005	<0.005	<0.005
Acetochlor	NR	<0.0001	<0.0001	<0.0001
Acetone (2008)	NR	<0.0050	<0.0050	<0.0050
Acrylonitrile	NR	<0.0010	<0.0010	<0.0010
Adipate, di(2-ethylhexyl)	0.400	<0.0006	<0.0006	<0.0006
Alachlor	0.002	<0.0001	<0.0001	<0.0001
Aldehydes, Total	NR	0.014	<0.005	<0.005
Aldicarb (Temik)	0.003	<0.0005	<0.0005	<0.0005
Aldicarb sulfone	0.002	<0.0007	<0.0007	<0.0007
Aldicarb sulfoxide	0.004	<0.0005	<0.0005	<0.0005
Aldrin	NR	<0.0001	<0.0001	<0.0001
Allyl chloride	NR	<0.0050	<0.0050	<0.0050
tert-Amyl Methyl ether	NR	<0.0030	<0.0030	<0.0030
Ametryn	NR	<0.0001	<0.0001	<0.0001
Anilizine	NR	<0.0010	<0.0010	<0.0010
Anthracene	NR	<0.0001	<0.0001	<0.0001
Aspon	NR	<0.0001	<0.0001	<0.0001
Atraton	NR	<0.0001	<0.0001	<0.0001
Atrazine	0.003	<0.0001	<0.0001	<0.0001
Azinphos-ethyl	NR	<0.0005	<0.0005	<0.0005
Azinphos-methyl	NR	<0.0005	<0.0005	<0.0005
Bendiocarb	NR	<0.0005	<0.0005	<0.0005
Benfluralin	NR	<0.0001	<0.0001	<0.0001
Benzaldehyde	NR	<0.005	<0.005	<0.005
Benzene	0.005	<0.0005	<0.0005	<0.0005
alpha-Benzene hexachloride	NR	<0.0001	<0.0001	<0.0001
beta-Benzene hexachloride	NR	<0.0001	<0.0001	<0.0001
delta-Benzene hexachloride	NR	<0.0001	<0.0001	<0.0001
gamma-Benzene hexachloride (Lindane)	0.0002	<0.00002	<0.00002	<0.00002

Benzo(a)anthracene	NR	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	NR	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	NR	<0.0001	<0.0001	<0.0001
Benzo(g, h, I)perylene	NR	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	NR	<0.00002	<0.00002	<0.00002
Bolstar	NR	<0.0001	<0.0001	<0.0001
Bromacil	NR	<0.0001	<0.0001	<0.0001
Bromobenzene	NR	<0.0005	<0.0005	<0.0005
Bromochloroacetic Acid	NR	0.0015	<0.0010	<0.0010
Bromochloroacetonitrile	NR	<0.0005	<0.0005	<0.0005
Bromochloromethane	NR	<0.0005	<0.0005	<0.0005
Bromodichloroacetic Acid	NR	0.0031	<0.0010	0.0011
Bromodichloromethane	0.080	0.0039	0.0007	0.0020
Bromoform	0.080	0.0006	<0.0005	<0.0005
Bromomethane	NR	<0.0005	<0.0005	<0.0005
Butachlor	NR	<0.0001	<0.0001	<0.0001
2-Butanone (MEK)	NR	<0.0050	<0.0050	<0.0050
Butylate	NR	<0.0001	<0.0001	<0.0001
tert-Butyl alcohol	NR	<0.0020	<0.0020	<0.0020
n-Butylacrylate	NR	<0.0010	<0.0010	<0.0010
n-Butylbenzene	NR	<0.0005	<0.0005	<0.0005
sec-Butylbenzene	NR	<0.0005	<0.0005	<0.0005
tert-Butylbenzene	NR	<0.0005	<0.0005	<0.0005
Butylbenzylphthalate	NR	<0.0010	<0.0010	<0.0010
Butyraldehyde (Butanal)	NR	<0.005	<0.005	<0.005
Carbaryl	NR	<0.0005	<0.0005	<0.0005
Carbofuran	0.040	<0.0009	<0.0009	<0.0009
Carbon disulfide	NR	<0.0050	<0.0050	<0.0050
Carbophenothion	NR	<0.0005	<0.0005	<0.0005
Carbon Tetrachloride	0.005	<0.0005	<0.0005	<0.0005
Carboxin	NR	<0.0001	<0.0001	<0.0001
Chlordane	0.002	<0.0001	<0.0001	<0.0001
Chlordane, alpha	0.002	<0.0001	<0.0001	<0.0001
Chlordane, gamma	0.002	<0.0001	<0.0001	<0.0001
Chlorfenvinphos	NR	<0.0050	<0.0050	<0.0050
Cloroacetonitrile	NR	<0.0050	<0.0050	<0.0050
Chlorobenzene	0.100	<0.0005	<0.0005	<0.0005
Chlorobenzilate	NR	<0.0001	<0.0001	<0.0001
2-Chlorobiphenyl	NR	<0.0001	<0.0001	<0.0001
1-Chlorobutane	NR	<0.0050	<0.0050	<0.0050
Chlorodibromoacetic Acid	NR	<0.0020	<0.0020	<0.0020
Chloroethane	NR	<0.0005	<0.0005	<0.0005
Chloroform	0.080	0.0049	<0.0005	0.0016
Chloromethane	NR	<0.0005	<0.0005	<0.0005
Chloroneb	NR	<0.0001	<0.0001	<0.0001
Chloropicrin	NR	0.0006	<0.0005	<0.0005
Chloroprene	NR	<0.0050	<0.0050	<0.0050
Chloropropylate	NR	<0.0001	<0.0001	<0.0001
Chlorothalonil	NR	<0.0001	<0.0001	<0.0001
2-Chlorotoluene (o-)	NR	<0.0005	<0.0005	<0.0005
4-Chlorotoluene (p-)	NR	<0.0005	<0.0005	<0.0005
Chlorpropham	NR	<0.0001	<0.0001	<0.0001
Chlorpyrifos	NR	<0.0001	<0.0001	<0.0001
Chlorpyrifos methyl	NR	<0.0005	<0.0005	<0.0005
Chrysene	NR	<0.0001	<0.0001	<0.0001

Clomazone	NR	<0.0001	<0.0001	<0.0001
Clopyralid	NR	<0.010	<0.010	<0.010
Coumaphos	NR	<0.0001	<0.0001	<0.0001
Crotonaldehyde	NR	<0.005	<0.005	<0.005
Crotoxyphos	NR	<0.0005	<0.0005	<0.0005
Cyanazine	NR	<0.0001	<0.0001	<0.0001
Cycloate	NR	<0.0001	<0.0001	<0.0001
Cyclohexanone	NR	<0.0050	<0.0050	<0.0050
2,4-D	0.070	<0.0001	<0.0001	<0.0001
DCPA	NR	<0.0001	<0.0001	<0.0001
4,4'-DDD	NR	<0.0001	<0.0001	<0.0001
4,4'-DDE	NR	<0.0001	<0.0001	<0.0001
4,4'-DDT	NR	<0.0001	<0.0001	<0.0001
Dalapon	0.200	<0.0010	<0.0010	<0.0010
Decanal	NR	<0.005	<0.005	<0.005
Deethylatrazine	NR	<0.0010	<0.0010	<0.0010
Deisopropylatrazine	NR	<0.0010	<0.0010	<0.0010
Demeton O	NR	<0.0005	<0.0005	<0.0005
Demeton S	NR	<0.0005	<0.0005	<0.0005
Desethylatrazine	NR	<0.0010	<0.0010	<0.0010
Desisopropylatrazine	NR	<0.0010	<0.0010	<0.0010
Diazinon	NR	<0.0001	<0.0001	<0.0001
Dibenzo(a,h)anthracene	NR	<0.0001	<0.0001	<0.0001
Dibromoacetic acid	NR	0.0029	<0.0010	<0.0010
Dibromoacetonitrile	NR	0.0008	<0.0005	<0.0005
Dibromochloromethane	0.080	0.0027	0.0007	0.0014
Dibromoethane (EDB)	0.00200	<0.0002	<0.0002	<0.0002
Dibromomethane	NR	<0.0005	<0.0005	<0.0005
1-2 Dibromo 3 chloropropane (DBCP)	0.00002	<0.0001	<0.0001	<0.0001
Di-n-butylphthalate	NR	<0.0020	<0.0020	<0.0020
Dicamba	NR	<0.0001	<0.0001	<0.0001
Dichlobenil	NR	<0.0001	<0.0001	<0.0001
Dichlofenthion	NR	<0.0001	<0.0001	<0.0001
Dichloran	NR	<0.0005	<0.0005	<0.0005
2,3-Dichlorobiphenyl	NR	<0.0001	<0.0001	<0.0001
Dichloroacetic Acid	NR	0.0039	<0.0010	0.0012
Dichloroacetonitrile	NR	<0.0005	<0.0005	<0.0005
Dichlorvos	NR	<0.0001	<0.0001	<0.0001
1,2-Dichlorobenzene	0.600	<0.0005	<0.0005	<0.0005
1,3-Dichlorobenzene	NR	<0.0005	<0.0005	<0.0005
1,4-Dichlorobenzene	0.075	<0.0005	<0.0005	<0.0005
trans-1,2-Dichloro-2-butylene	NR	<0.0050	<0.0050	<0.0050
Dichlorodifluoromethane	NR	<0.0005	<0.0005	<0.0005
1,1-Dichloroethane	NR	<0.0005	<0.0005	<0.0005
1,2- Dichloroethane	0.005	<0.0005	<0.0005	<0.0005
1,1-Dichloroethylene	0.007	<0.0005	<0.0005	<0.0005
1,2-Dichloroethylene, cis	0.070	<0.0005	<0.0005	<0.0005
1,2-Dichloroethylene, trans	0.100	<0.0005	<0.0005	<0.0005
Di (2-chloroethyl) ether	NR	<0.0020	<0.0020	<0.0020
Dichloromethane (methylene chloride)	0.005	<0.0005	<0.0005	<0.0005
1,2-Dichloropropane	0.005	<0.0005	<0.0005	<0.0005
1,3-Dichloropropane	NR	<0.0005	<0.0005	<0.0005
2,2-Dichloropropane	NR	<0.0005	<0.0005	<0.0005
1,1-Dichloropropanone	NR	<0.0050	<0.0050	<0.0050
1,1-Dichloropropene	NR	<0.0005	<0.0005	<0.0005

1,3-Dichloropropene	NR	<0.0005	<0.0005	<0.0005
1,1-Dichloropropylene	NR	<0.0005	<0.0005	<0.0005
cis 1,3-Dichloropropylene	NR	<0.0005	<0.0005	<0.0005
trans 1,3-Dichloropropylene	NR	<0.0005	<0.0005	<0.0005
Dicrotophos	NR	<0.0005	<0.0005	<0.0005
Dieldrin	NR	<0.0001	<0.0001	<0.0001
Di (2-ethylhexyl) adipate	400	<0.0006	<0.0006	<0.0006
Di (2-ethylhexyl) phthalate	6	<0.0006	<0.0006	<0.0006
Diethylether (2004)	NR	<0.002	<0.002	<0.002
Diethylphthalate	NR	<0.0010	<0.0010	<0.0010
Dimethoate	NR	<0.0005	<0.0005	<0.0005
Dimethylphthalate	NR	<0.0010	<0.0010	<0.0010
2,4-Dinitrotoluene	NR	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene (UCMR)	NR	<0.0005	<0.0005	<0.0005
Di-n-octylphthatate	NR	<0.0020	<0.0020	<0.0020
Dinoseb	0.007	<0.0001	<0.0001	<0.0001
1,4 Dioxane	NR	0.0068	<0.0050	<0.0050
Dioxathion	NR	<0.0005	<0.0005	<0.0005
Dioxin (2,3,7,8-TCDD)	0.00000003	<0.0000000050	<0.0000000050	<0.0000000050
Diphenamid	NR	<0.0001	<0.0001	<0.0001
Diquat	0.020	<0.0004	<0.0004	<0.0004
Disulfoton	NR	<0.0001	<0.0001	<0.0001
Disulfoton sulfone	NR	<0.0001	<0.0001	<0.0001
Disulfoton sulfoxide	NR	<0.010	<0.010	<0.010
Endosulfan I	NR	<0.0001	<0.0001	<0.0001
Endosulfan II	NR	<0.0001	<0.0001	<0.0001
Endosulfan sulfate	NR	<0.0001	<0.0001	<0.0001
Endothall	0.100	<0.0090	<0.0090	<0.0090
Endrin	0.002	<0.00001	<0.00001	<0.00001
Endrin aldehyde	NR	<0.0005	<0.0005	<0.0005
Epichlorohydrin	NR	<0.0010	<0.0010	<0.0010
EPN	NR	<0.0005	<0.0005	<0.0005
EPTC	NR	<0.0001	<0.0001	<0.0001
Erucylamide	NR	<0.0050	<0.0050	<0.0050
Esfenvalerate	NR	<0.0005	<0.0005	<0.0005
Ethalfluralin	NR	<0.0001	<0.0001	<0.0001
Ethion	NR	<0.0050	<0.0050	<0.0050
Ethofumesate	NR	<0.0005	<0.0005	<0.0005
Ethoprop	NR	<0.0010	<0.0010	<0.0010
Ethylacrylate	NR	<0.0010	<0.0010	<0.0010
Ethylbenzene	0.700	<0.0005	<0.0005	<0.0005
Ethylene dibromide (EDB)	0.00005	<0.00001	<0.00001	<0.00001
Ethyl ether	NR	<0.0020	<0.0020	<0.0020
Ethyl methacrylate	NR	<0.0010	<0.0010	<0.0010
Ethyl tert-butyl ether	NR	<0.0030	<0.0030	<0.0030
Etridiazole	NR	<0.0001	<0.0001	<0.0001
Famphur	NR	<0.0001	<0.0001	<0.0001
Fenamiphos	NR	<0.0001	<0.0001	<0.0001
Fenarimol	NR	<0.0010	<0.0010	<0.0010
Fenitrothion	NR	<0.0005	<0.0005	<0.0005
Fenoxyprop-ethyl	NR	<0.0010	<0.0010	<0.0010
Fensulfothion	NR	<0.0005	<0.0005	<0.0005
Fenthion	NR	<0.0001	<0.0001	<0.0001
Fluazifop-butyl	NR	<0.0001	<0.0001	<0.0001
Fluchloralin	NR	<0.0001	<0.0001	<0.0001

Fluometuron	NR	<0.0005	<0.0005	<0.0005
Fluoranthene	NR	<0.0001	<0.0001	<0.0001
Fluorene	NR	<0.0001	<0.0001	<0.0001
Fluridone	NR	<0.0010	<0.0010	<0.0010
Fonofos	NR	<0.0001	<0.0001	<0.0001
Formaldehyde	NR	0.014	<0.005	<0.005
Glyoxal	NR	<0.005	<0.005	<0.005
Glyphosate (Round-up)	0.7	<0.006	<0.006	<0.006
Haloacetic acids(9), Total	0.060	0.0094	ND	0.0012
Heptachlor	0.0004	<0.00004	<0.00004	<0.00004
Heptachlor epoxide	0.0002	<0.00002	<0.00002	<0.00002
Heptanal	NR	<0.005	<0.005	<0.005
Hexachlorobenzene	0.0010	<0.0001	<0.0001	<0.0001
2,2',3,3',4,4',6-Heptachlorobiphenyl	NR	<0.0005	<0.0005	<0.0005
2,2',4,4',5,6'-Hexachlorobiphenyl	NR	<0.0001	<0.0001	<0.0001
Hexachlorobutadiene	NR	<0.0005	<0.0005	<0.0005
Hexachloroethane	NR	<0.0020	<0.0020	<0.0020
Hexachlorocyclopentadiene	0.0500	<0.0001	<0.0001	<0.0001
Hexanal	NR	<0.005	<0.005	<0.005
2-Hexanone	NR	<0.0050	<0.0050	<0.0050
Hexazinone	NR	<0.0001	<0.0001	<0.0001
3-Hydroxycarbofuran	NR	<0.0005	<0.0005	<0.0005
Indeno(1,2,3-cd)pyrene	NR	<0.0001	<0.0001	<0.0001
Iprodione	NR	<0.0005	<0.0005	<0.0005
Isofenphos	NR	<0.0005	<0.0005	<0.0005
Isophorone	NR	<0.0001	<0.0001	<0.0001
Isopropylbenzene	NR	<0.0005	<0.0005	<0.0005
4-Isopropyltoluene (p-)	NR	<0.0005	<0.0005	<0.0005
Leptophos	NR	<0.0005	<0.0005	<0.0005
Lindane	0.0002	<0.00002	<0.00002	<0.00002
Malathion	NR	<0.0001	<0.0001	<0.0001
Merphos (2004)	NR	<0.002	<0.002	<0.002
Metalazyl	NR	<0.0005	<0.0005	<0.0005
Methacrylonitrile	NR	<0.0050	<0.0050	<0.0050
Methomyl	0.005	<0.0005	<0.0005	<0.0005
Methoxychlor	0.040	<0.0001	<0.0001	<0.0001
Methylacrylate	NR	<0.0010	<0.0010	<0.0010
Methyl iodide (Iodomethane)	NR	<0.0020	<0.0020	<0.0020
Methylmethacrylate	NR	<0.0010	<0.0010	<0.0010
1-Methyl naphthalene	NR	<0.0001	<0.0001	<0.0001
2-Methyl naphthalene	NR	<0.0001	<0.0001	<0.0001
Methyl paraoxon	NR	<0.0005	<0.0005	<0.0005
Methyl parathion	NR	<0.0005	<0.0005	<0.0005
4-Methyl-2-pentanone (MIBK)	NR	<0.0020	<0.0020	<0.0020
2-Methylpropanol (2005)	NR	<0.002	<0.002	<0.002
Methyl-t-butyl ether (MTBE)	NR	<0.0005	<0.0005	<0.0005
Metolachlor (Dual)	NR	<0.0001	<0.0001	<0.0001
Metribuzin (Sencor)	NR	<0.0001	<0.0001	<0.0001
Metsulfuron methyl	NR	<0.010	<0.010	<0.010
Mevinphos	NR	<0.0001	<0.0001	<0.0001
MGK-264 isomer a	NR	<0.0001	<0.0001	<0.0001
MGK-264 isomer b	NR	<0.0001	<0.0001	<0.0001
MGK-326	NR	<0.0001	<0.0001	<0.0001
Mirex	NR	<0.0005	<0.0005	<0.0005
Molinate (UCMR)	NR	<0.0001	<0.0001	<0.0001

Monobromoacetic Acid	NR	<0.0010	<0.0010	<0.0010
Monochloroacetic Acid	NR	0.0029	<0.0020	<0.0020
Monocrotophos	NR	<0.0005	<0.0005	<0.0005
Naled	NR	<0.0005	<0.0005	<0.0005
Naphthalene	NR	<0.0001	<0.0001	<0.0001
Napropamide	NR	<0.0001	<0.0001	<0.0001
Nitrobenzene (UCMR)	NR	<0.0050	<0.0050	<0.0050
2-Nitropropane	NR	<0.0020	<0.0020	<0.0020
cis-Nonachlor	NR	<0.0001	<0.0001	<0.0001
trans-Nonachlor	NR	<0.0001	<0.0001	<0.0001
Nonanal	NR	<0.005	<0.005	<0.005
Norflurazon	NR	<0.0010	<0.0010	<0.0010
2,2',3,3',4,5',6,6'-Octachlorobiphenyl	NR	<0.0005	<0.0005	<0.0005
Octanal	NR	<0.005	<0.005	<0.005
Oryzalin	NR	<0.010	<0.010	<0.010
Oxadiazon	NR	<0.0001	<0.0001	<0.0001
Oxamyl (Vydate)	0.200	<0.0010	<0.0010	<0.0010
Oxychlordane	NR	<0.0001	<0.0001	<0.0001
Oxyfluorfen	NR	<0.0005	<0.0005	<0.0005
Parathion	NR	<0.0005	<0.0005	<0.0005
Pebulate	NR	<0.0001	<0.0001	<0.0001
Pendimethalin	NR	<0.0001	<0.0001	<0.0001
Pentachlorobenzene	NR	<0.0005	<0.0005	<0.0005
Pentachloronitrobenzene	NR	<0.0005	<0.0005	<0.0005
2,2',3',4,6-Pentachlorobiphenyl	NR	<0.0001	<0.0001	<0.0001
Pentachloroethane	NR	<0.0020	<0.0020	<0.0020
Pentachlorophenol	0.0010	<0.00004	<0.00004	<0.00004
PAHs(benzo(a)-pyrene)	0.0002 (D)	<0.00002	<0.00002	<0.00002
cis-Permethrin	NR	<0.0001	<0.0001	<0.0001
trans-Permethrin	NR	<0.0001	<0.0001	<0.0001
Phathalate, (di(2-ethylhexyl)	0.006	<0.0006	<0.0006	<0.0006
Phenanthrene	NR	<0.0001	<0.0001	<0.0001
Phorate	NR	<0.0001	<0.0001	<0.0001
Phosmet	NR	<0.0005	<0.0005	<0.0005
E-Phosphamidon	NR	<0.0005	<0.0005	<0.0005
Z-Phosphamidon	NR	<0.0005	<0.0005	<0.0005
Picloram (Tordon)	0.500	<0.0001	<0.0001	<0.0001
Polychlorinated Byphenyls (PCB's), Total****	0.0005			
Aroclor 1016	NR	<0.00008	<0.00008	<0.00008
Aroclor 1221	NR	<0.00019	<0.00019	<0.00019
Aroclor 1232	NR	<0.00023	<0.00023	<0.00023
Aroclor 1242	NR	<0.00026	<0.00026	<0.00026
Aroclor 1248	NR	<0.0001	<0.0001	<0.0001
Aroclor 1254	NR	<0.0001	<0.0001	<0.0001
Aroclor 1260	NR	<0.0002	<0.0002	<0.0002
Profluralin	NR	<0.0001	<0.0001	<0.0001
Prometon	NR	<0.0010	<0.0010	<0.0010
Prometryn	NR	<0.0001	<0.0001	<0.0001
Pronamide	NR	<0.0001	<0.0001	<0.0001
Propachlor	NR	<0.0001	<0.0001	<0.0001
Propanil	NR	<0.0005	<0.0005	<0.0005
Propazine	NR	<0.0001	<0.0001	<0.0001
Propiconazole isomer a	NR	<0.0050	<0.0050	<0.0050
Propiconazole isomer b	NR	<0.0050	<0.0050	<0.0050
Propionaldehyde (Propanal)	NR	<0.005	<0.005	<0.005

Propionitrile	NR	<0.0050	<0.0050	<0.0050
n-Propylbenzene	NR	<0.0005	<0.0005	<0.0005
Prothiofos	NR	<0.0005	<0.0005	<0.0005
Pyrene	NR	<0.0001	<0.0001	<0.0001
Pyruvaldehyde (Methylglyoxal)	NR	<0.005	<0.005	<0.005
Silvex (2, 4, 5-TP)	0.05	<0.0001	<0.0001	<0.0001
Simazine	0.0040	<0.00007	<0.00007	<0.00007
Simetryn	NR	<0.0001	<0.0001	<0.0001
Stirofos	NR	<0.0001	<0.0001	<0.0001
Styrene	0.100	<0.0005	<0.0005	<0.0005
Sulfotep	NR	<0.0005	<0.0005	<0.0005
Tebuthiuron	NR	<0.010	<0.010	<0.010
TEPP	NR	<0.010	<0.010	<0.010
Terbacil	NR	<0.0001	<0.0001	<0.0001
Terbufos	NR	<0.0005	<0.0005	<0.0005
Terbutryn	NR	<0.0001	<0.0001	<0.0001
1,2,4,5-Tetrachlorobenzene	NR	<0.0005	<0.0005	<0.0005
2,2',4,4'-Tetrachorobiphenyl	NR	<0.0001	<0.0001	<0.0001
1,1,1,2-Tetrachloroethane	NR	<0.0005	<0.0005	<0.0005
1,1,2,2-Tetrachloroethane	NR	<0.0005	<0.0005	<0.0005
Tetrachloroethylene	0.005	<0.0005	<0.0005	<0.0005
Tetrahydrofuran	NR	<0.0050	<0.0050	<0.0050
Thiabendazole	NR	<0.010	<0.010	<0.010
Thiobencarb	NR	<0.0001	<0.0001	<0.0001
Thionazin	NR	<0.0005	<0.0005	<0.0005
Toluene	1.000	<0.0005	<0.0005	<0.0005
Toxaphene	NR	<0.0010	<0.0010	<0.0010
2,4,5-TP (Silvex)	0.050	<0.0001	<0.0001	<0.0001
Triademefon	NR	<0.0005	<0.0005	<0.0005
Tribromoacetic Acid	NR	<0.004	<0.004	<0.004
Tribufos (DEF)	NR	<0.0001	<0.0001	<0.0001
Trichlorfon (2005)	NR	<0.010	<0.010	<0.010
Trichloroacetic Acid	NR	0.0019	<0.0010	<0.0010
Trichloroacetonitrile	NR	<0.0005	<0.0005	<0.0005
1,2,3-Trichlorobenzene	NR	<0.0005	<0.0005	<0.0005
1,2,4-Trichlorobenzene	0.070	<0.0005	<0.0005	<0.0005
2,4,5-Trichlorobiphenyl	NR	<0.0001	<0.0001	<0.0001
1,1,1-Trichloroethane	0.200	<0.0005	<0.0005	<0.0005
1,1,2-Trichloroethane	0.005	<0.0005	<0.0005	<0.0005
Trichloroethylene	0.005	<0.0005	<0.0005	<0.0005
Trichlorofluoromethane	NR	<0.0005	<0.0005	<0.0005
Trichloronate	NR	<0.0005	<0.0005	<0.0005
1,2,3-Trichloropropane	NR	<0.0005	<0.0005	<0.0005
1, 1, 1-Trichloropropanone	NR	0.0012	<0.0005	<0.0005
1,1,2-Trichloro-1,2,2-trifluorethane	NR	<0.0005	<0.0005	<0.0005
Tricyclazone	NR	<0.0010	<0.0010	<0.0010
1,2,3-Trimethylbenzene	NR	<0.0005	<0.0005	<0.0005
1,2,4-Trimethylbenzene	NR	<0.0005	<0.0005	<0.0005
1,3,5-Trimethylbenzene	NR	<0.0005	<0.0005	<0.0005
Trifluralin	NR	<0.0010	<0.0010	<0.0010
Trihalomethanes, total	0.080	0.0104	0.0014	0.0036
n-Valeraldehyde (Pentanal)	NR	<0.005	<0.005	<0.005
Vernolate	NR	<0.0001	<0.0001	<0.0001
Vinclozolin	NR	<0.0005	<0.0005	<0.0005
Vinyl acetate	NR	<0.0050	<0.0050	<0.0050

Vinyl Chloride	0.0002	<0.0002	<0.0002	<0.0002
Xylene, total	10.000	<0.0005	<0.0005	<0.0005

Estrogens and Other Hormones (EDCs)

Diethylstilbestrol (DES)	NR	<0.0000005	<0.0000005	<0.0000005
17alpha-Estradiol	NR	<0.0000005	<0.0000005	<0.0000005
17beta-Estradiol	NR	<0.0000005	<0.0000005	<0.0000005
Estriol	NR	<0.0000005	<0.0000005	<0.0000005
Estrone	NR	<0.0000005	<0.0000005	<0.0000005
17alpha-Ethynl estradiol	NR	<0.0000005	<0.0000005	<0.0000005
Progesterone	NR	<0.0000001	<0.0000001	<0.0000001
cis-Testosterone	NR	<0.0000001	<0.0000001	<0.0000001
trans-Testosterone	NR	<0.0000001	<0.0000001	<0.0000001

Explosives and Related Compounds (2006)

2-Amino-4,6-dinitrotoluene	NR	<0.0005	<0.0005	<0.0005
4-Amino-2,6-dinitrotoluene	NR	<0.0005	<0.0005	<0.0005
3,5-Dinitroanaline	NR	<0.0005	<0.0005	<0.0005
1,3-Dinitrobenzene	NR	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	NR	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	NR	<0.0005	<0.0005	<0.0005
Nitrobenzene	NR	<0.0005	<0.0005	<0.0005
2-Nitrotoluene	NR	<0.0005	<0.0005	<0.0005
3-Nitrotoluene	NR	<0.0005	<0.0005	<0.0005
4-Nitrotoluene	NR	<0.0005	<0.0005	<0.0005
RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)	NR	<0.0005	<0.0005	<0.0005
Tetryl (2,4,6-Trinitrophenylmethylnitramine)	NR	<0.0010	<0.0010	<0.0010
TNT (2,4,6 Trinitrotoluene)	NR	<0.0005	<0.0005	<0.0005
1,3,5-Trinitrobenzene	NR	<0.0005	<0.0005	<0.0005

Flame Retardants and Selected Pesticides***** (2006)

Atrazine	0.003	<0.00025	<0.00025	<0.00025
Bifenthrin	NR	<0.00025	<0.00025	<0.00025
Bromacil	NR	<0.00025	<0.00025	<0.00025
Chlorpyrifos	NR	<0.00025	<0.00025	<0.00025
Dimethoate	NR	<0.00025	<0.00025	<0.00025
Esbiol	NR	<0.00025	<0.00025	<0.00025
Esfenvalerate	NR	<0.00025	<0.00025	<0.00025
Fenvalerate	NR	<0.00025	<0.00025	<0.00025
Hexabromobiphenyl	NR	<0.00025	<0.00025	<0.00025
2,2',4,4',4,4'-Hexabromodiphenyl ether (BDE-153)	NR	<0.00025	<0.00025	<0.00025
Hexazinone	NR	<0.00025	<0.00025	<0.00025
Kepone	NR	<0.00025	<0.00025	<0.00025
Malathion	NR	<0.00025	<0.00025	<0.00025
Mirex	NR	<0.00025	<0.00025	<0.00025
Nitrofen	NR	<0.00025	<0.00025	<0.00025
Norflurazon	NR	<0.00025	<0.00025	<0.00025
Oxychlordane	NR	<0.00025	<0.00025	<0.00025
Parathion	NR	<0.00025	<0.00025	<0.00025
2,2',4,4',5-Pentrabromodiphenyl ether (BDE-99)	NR	<0.00025	<0.00025	<0.00025
2,2',4,4',6-Pentrabromodiphenyl ether (BDE-100)	NR	<0.00025	<0.00025	<0.00025
Prometryn	NR	<0.00025	<0.00025	<0.00025
Propazine	NR	<0.00025	<0.00025	<0.00025
Terbufos-sulfone	NR	<0.00025	<0.00025	<0.00025
2,2',4,4'-Tetrabromodiphenyl ether (BDE-47)	NR	<0.00025	<0.00025	<0.00025

Thiobencarb	NR	<0.00025	<0.00025	<0.00025
Vinclozolin	NR	<0.00025	<0.00025	<0.00025
Fluoropolymers				
Perfluorooctane sulfonate (PFOS)	NR	0.0000021	0.0000015	0.0000018
Perfluorocatanoic acid (PFOA)	NR	<0.000010	<0.000010	<0.000010
Perfluorobutanoic acid (PFBA)	NR	<0.0000002	<0.0000002	<0.0000002
Phosphate Flame Retardants (2008)				
Diphenylcresyl phosphate	NR	<0.0001	<0.0001	<0.0001
2-Ethylhexydiphenyl phosphate	NR	<0.0001	<0.0001	<0.0001
Tributyl phosphate	NR	<0.0001	<0.0001	<0.0001
Triethyl phosphate	NR	<0.0001	<0.0001	<0.0001
Tri-m-cresyl phosphate	NR	<0.0001	<0.0001	<0.0001
Tri-o-cresyl phosphate	NR	<0.0001	<0.0001	<0.0001
Tri-p-cresyl phosphate	NR	<0.0001	<0.0001	<0.0001
Trimethyl phosphate (Semi-Quantitative)	NR	<0.0001	<0.0001	<0.0001
Tripentyl phosphate	NR	<0.0001	<0.0001	<0.0001
Triphenyl phospate	NR	<0.0001	<0.0001	<0.0001
Tris(2-butoxyethyl) phosphate	NR	<0.0005	<0.0005	<0.0005
Tris(2-chloroethyl) phosphate	NR	<0.0001	<0.0001	<0.0001
Tris(chloropropyl) phosphate	NR	<0.0001	<0.0001	<0.0001
Tris(2,3-dibromopropyl) phosphate	NR	<0.0010	<0.0010	<0.0010
Tris(1,3-dichloro-2-propyl) phosphate	NR	<0.0001	<0.0001	<0.0001
Tris(2-ethylhexyl) phosphate	NR	<0.0001	<0.0001	<0.0001
Nitrosamines				
N-Nitropyrrolidine (NPYR)	NR	<0.0000020	<0.0000020	<0.0000020
N-Nitrosodi-N-butylamine (NDBA)	NR	<0.0000040	<0.0000040	<0.0000040
N-Nitrosodiethylamine (NDEA)	NR	<0.0000050	<0.0000050	<0.0000050
N-Nitrosodimethylamine (NDMA)	NR	<0.0000020	<0.0000020	<0.0000020
N-Nitrosodi-N-propylamine (NDPA)	NR	<0.0000070	<0.0000070	<0.0000070
N-Nitrosomethylethylamine (NMEA)	NR	<0.0000030	<0.0000030	<0.0000030
N-Nitrosopiperidine	NR	<0.0000020	<0.0000020	<0.0000020
Phenolic Endocrine Disruptors (EDCs)				
Bisphenol A	NR	<0.0001	<0.0001	<0.0001
Nonylphenol diethoxylate, isomer mix (2006)	NR	<0.0010	<0.0010	<0.0010
Nonylphenol monoethoxylate, isomer mix (2006)	NR	<0.010	<0.010	<0.010
Nonylphenol, isomer mix	NR	<0.0005	<0.0005	<0.0005
4-n-Octylphenol	NR	<0.0005	<0.0005	<0.0005
4-tert-Octylphenol	NR	<0.0005	<0.0005	<0.0005
Pentachlorophenol	NR	<0.0001	<0.0001	<0.0001
Phenylphenol	NR	<0.0001	<0.0001	<0.0001
Tetrabromobisphenol A	NR	<0.0001	<0.0001	<0.0001
2, 4, 6-Trichlorophenol	NR	<0.0001	<0.0001	<0.0001
Pharmaceuticals & Personal Care Products				
Acetaminophen	NR	<0.000005	<0.000005	<0.000005
Amoxicillin (2008)	NR	<0.00005	<0.00005	<0.00005
Antipyrine	NR	<0.000001	<0.000001	<0.000001
Aspirin	NR	<0.000001	<0.000001	<0.000001
Azithromycin	NR	<0.000001	<0.000001	<0.000001
Bacitracin	NR	<0.0005	<0.0005	<0.0005

Bezafibrate	NR	<0.0000005	<0.0000005	<0.0000005
Caffeine	NR	<0.00005	<0.00005	<0.00005
Carbadox	NR	<0.00005	<0.00005	<0.00005
Carbamazepine	NR	<0.000001	<0.000001	<0.000001
Chloramphenicol	NR	<0.000005	<0.000005	<0.000005
Chlorotetracycline	NR	<0.00005	<0.00005	<0.00005
Ciprofloxacin	NR	<0.00005	<0.00005	<0.00005
Clofibric acid	NR	<0.0000005	<0.0000005	<0.0000005
Cotinine	NR	0.000003	0.000001	0.000002
1, 7-Dimethylxanthine (2006)	NR	<0.00000050	<0.00000050	<0.00000050
DEET	NR	<0.000005	<0.000005	<0.000005
Diclofenac	NR	<0.0000005	<0.0000005	<0.0000005
Dilantin	NR	<0.00005	<0.00005	<0.00005
Diltiazem	NR	<0.000001	<0.000001	<0.000001
Doxycycline	NR	<0.00005	<0.00005	<0.00005
Enrofloxacin	NR	<0.0005	<0.0005	<0.0005
Erythromycin	NR	<0.000001	<0.000001	<0.000001
Fluoxetine (Prozac)	NR	<0.000001	<0.000001	<0.000001
Gemfibrozil	NR	<0.0000005	<0.0000005	<0.0000005
Ibuprofen	NR	<0.00005	<0.00005	<0.00005
Lasalocid	NR	<0.000001	<0.000001	<0.000001
Levothyroxine (Synthroid)	NR	<0.00005	<0.00005	<0.00005
Lincomycin	NR	<0.0000001	<0.0000001	<0.0000001
Monensin	NR	<0.0000010	<0.0000010	<0.0000010
Naproxen	NR	<0.000002	<0.000002	<0.000002
Narasin	NR	<0.0000001	<0.0000001	<0.0000001
Nicotine	NR	<0.000005	<0.000005	<0.000005
Norfloxacin	NR	<0.0005	<0.0005	<0.0005
Oleandomycin	NR	<0.000001	<0.000001	<0.000001
Oxytetracycline	NR	<0.0005	<0.0005	<0.0005
Paraxanthine	NR	<0.000005	<0.000005	<0.000005
Penicillin G	NR	<0.000002	<0.000002	<0.000002
Penicillin V	NR	<0.000002	<0.000002	<0.000002
Prednisone	NR	<0.000005	<0.000005	<0.000005
Roxithromycin	NR	<0.000001	<0.000001	<0.000001
Salinomycin	NR	<0.000001	<0.000001	<0.000001
Simvastatin	NR	<0.000001	<0.000001	<0.000001
Sulfachloropyridazine	NR	<0.000005	<0.000005	<0.000005
Sulfadiazine	NR	<0.000005	<0.000005	<0.000005
Sulfadimethoxine	NR	<0.000001	<0.000001	<0.000001
Sulfamerazine	NR	<0.000005	<0.000005	<0.000005
Sulfamethazine	NR	<0.000001	<0.000001	<0.000001
Sulfamethizole	NR	<0.000005	<0.000005	<0.000005
Sulfamethoxazole	NR	<0.000005	<0.000005	<0.000005
Sulthiazole	NR	<0.000005	<0.000005	<0.000005
Theobromine	NR	<0.00005	<0.00005	<0.00005
Theophylline	NR	<0.000005	<0.000005	<0.000005
Triclosan	NR	<0.000005	<0.000005	<0.000005
Trimethoprim	NR	<0.000001	<0.000001	<0.000001
Tylosin	NR	<0.000001	<0.000001	<0.000001
Virginiamycin M1	NR	<0.000001	<0.000001	<0.000001

Radionuclides (pCi/L) (2008)

Gross Alpha	15	2.1 ± 1.6	0.62 ± 0.68	1.36 ± 1.14

Radium - 226	5.0	0.50 ± 0.36	0.13 ± 0.24	0.32 ± 0.30
Radium - 228	combined	1.1 ± 0.6	0.87 ± 0.52	0.99 ± 0.56
Uranium, Total	20 (P)	0.18 ± 0.14	0.10 ± 0.02	0.14 ± 0.06
UCMR-2 (2008)				
Acetochlor	NR	<0.0020	<0.0020	<0.0020
Alachlor	NR	<0.0020	<0.0020	<0.0020
Metolachlor	NR	<0.0010	<0.0010	<0.0010
Acetochlor ESA	NR	<0.0010	<0.0010	<0.0010
Acetochlor OA	NR	<0.0020	<0.0020	<0.0020
Alachlor ESA	NR	<0.0010	<0.0010	<0.0010
Alachlor OA	NR	<0.0010	<0.0010	<0.0010
Metolachlor ESA	NR	<0.0010	<0.0010	<0.0010
Metolachlor OA	NR	<0.0020	<0.0020	<0.0020
Dimethoate	NR	<0.0007	<0.0007	<0.0007
2,2',4,4',5,5'-Hexabromobiphenyl (HBB)	NR	<0.0007	<0.0007	<0.0007
2,2',4,4',5,5'-Hexabromobiphenyl ether (BDE-153)	NR	<0.0008	<0.0008	<0.0008
2,2',4,4',5-Pentabromodiphenyl ether (BDE-99)	NR	<0.0009	<0.0009	<0.0009
2,2',4,4',6-Pentabromodiphenyl ether (BDE-100)	NR	<0.0005	<0.0005	<0.0005
Terbufos-sulfone	NR	<0.0004	<0.0004	<0.0004
2,2',4,4'-Tetrabromodephenyl ether (BDE-47)	NR	<0.0003	<0.0003	<0.0003
1,3-Dinitrobenzene	NR	<0.0008	<0.0008	<0.0008
RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)	NR	<0.0010	<0.0010	<0.0010
TNT (2,4,6-Trinitrotoluene)	NR	<0.0008	<0.0008	<0.0008

MCL = Maximum Contaminant Level, the highest level at which a contaminant is allowed to be present in the water at the tap.

TT=Treatment Technique P = Proposed level, regulations pending

n.o.o.=no odor observed NR = Not Regulated S=Secondary contaminant

Results preceded by "less than" (<) were below the minimum detection limit.

UCMR=These compounds were tested for compliance with the Unregulated Contaminant Monitoring Rule.

* There were no detections of *Cryptosporidium parvum* in 50 tests.

** There were no detections of *Giardia lamblia* in 50 tests.

****PCB's are summation of Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260. None were detected.

*****The list of Flame Retardants and Selected Pesticides is tested using USEPA Method 527. This chemicals are included in the Unregulated Contaminant Monitoring Rule-2.

' The average instead of the median is reported for these values.

Note for Copper and Lead: There is little to no detectable lead in Lake Michigan water, the source of Milwaukee's supply. The major sources of copper and lead in drinking water in Milwaukee are service lines, building plumbing, and fixtures. From these sources, some homes in the community have lead levels above the EPA action level of 0.015 mg/L. Milwaukee Water Works has installed and is operating treatment facilities to reduce lead in drinking water.

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For more information, please call the Water Quality section at the Milwaukee Water Works, (414) 286-2585