

BROWN DEER WATER UTILITY

TREATED WATER QUALITY 2013

LISTED below are the regulated contaminants DETECTED in Milwaukee's drinking water during 2013. *All are below levels allowed by state and federal laws.* The table contains the name of each substance; the ideal goals for public health; the highest level allowed by regulation, the amount detected, the usual sources of such contamination, and footnotes explaining the findings and units of measurement. A list of the hundreds of other compounds for which the water was tested but not found can be located at: <http://www.milwaukee.gov/water/about/WaterQuality.htm>.

Substance	Ideal Goals (MCLG)	Highest Level Allowed (MCL)	Median Value	Highest Level Detected	Sources of Contaminant
Aluminum	0.2 mg/L	NR	0.041 mg/L	0.121 mg/L	Water treatment additive; natural deposits.
Barium	2 mg/L	2 mg/L	0.02 mg/L	0.02 mg/L	Natural deposits.
Bromate	10 µg/L	10 µg/L (RAA)	<5 µg/L (RAA)	7.3 µg/L	Disinfection by-product
Strontium	NA	NR	120 µg/L	120 µg/L	Natural deposits.
Nitrate	10.0 mg/L	10.0 mg/L	0.25 mg/L	0.30 mg/L	Natural deposits, farm runoff
Molybdenum	NA	NR	1.0 µg/L	1.1 µg/L	Natural deposits.
Manganese	50 µg/L	NR	<0.5 µg/L	0.7 µg/L	Natural deposits.
Chromium, total	NA	100 µg/L	0.3 µg/L	0.3 µg/L	Natural deposits, manufacturing.
Chromium, Hexavalent	NA	NR	0.2 µg/L	0.25 µg/L	Natural deposits, manufacturing.
Copper (2011)	1.3 mg/L	1.3 mg/L (AL)	.053mg/L	.313 mg/L	Natural deposits. Corrosion of household plumbing systems.
Lead (2011)	0 µg/L	15 µg/L (AL)	<1 µg/L	2 µg/L	Natural deposits. Corrosion of household plumbing systems
Iron	0.30 mg/L	NR	0.006 mg/L	0.020 mg/L	Natural deposits
Chlorate	NA	NR	60 µg/L	100 µg/L	Byproduct of drinking water disinfection
Fluoride	4 mg/L	4 mg/L	0.58 mg/L	.68 mg/L	Water treatment additive, natural deposits.
Gross Alpha particles (2011)	0	15pCi/L	2.7 pCi/L	2.8 pCi/L	Natural deposits
Gross Beta Particles (2011)	0	50 pCi/L	5.3 pCi/L	6.0 pCi/L	Natural deposits
Total Dissolved Solids	500 mg/L	NR	179 mg/L	187 mg/L	Natural deposits
Chlorine, Total	4 mg/L	4 mg/L	.80 mg/L	1.48 mg/L	Residual of water disinfection.
Haloacetic Acids , Total	NA	60 µg/L	1.95 µg/L	2.9 µg/L	Byproduct of drinking water disinfection.
Trihalomethanes, Total	NA	80 µg/L	6.65 µg/L	7.5 µg/L	Byproduct of drinking water disinfection.
Sulfate	500 mg/L	NR	26 mg/L	27 mg/L	Naturally present
Turbidity	NA	TT<0.3 NTU 95% of the time	0.04 NTU 95% of the time	0.22 NTU One day max	Natural sediment
Uranium, Total (2011)	0	30 pCi/L	0.23 pCi/L	0.25 pCi/L	Natural deposits.
Vanadium	NA	NR	0.3 µg/L	0.3 µg/L	Natural deposits.
Radium – Combined (2011)	0 pCi/L	5 pCi/L	1.98 pCi/L	1.99 pCi/L	Natural deposits.
Chloride	250 mg/L	NR	15.7 mg/L	18.9 mg/L	Natural deposits, road salt.
Total Coliform Bacteria	0	<5 % of samples/month	0.0%	0.0%	Naturally present in the environment.

DEFINITIONS

AL – Action Level: The concentration of a contaminant that triggers treatment or other requirement that a water system must follow. Action levels are reported at the 90th percentile for homes at greatest risk.

Haloacetic Acids – mono-, di-, and tri-chloroacetic acid; mono- and di-bromoacetic acid; and bromochloroacetic acids

Median – The middle value of the entire data set for the parameter (range from high to low). < - means "less than"

MCL – **MAXIMUM CONTAMINANT LEVEL** - The highest level of a contaminant that is allowed in drinking water.

MCLG - **MAXIMUM CONTAMINANT LEVEL GOAL** – The level of a contaminant in drinking water below which there is no known or expected risk to health.

Mg/L Milligram per Liter equal to one part per million (ppm) **µg/L** microgram per liter, equal to one part per billion (ppb)

NR – not regulated **NTU** – Nephelometric Turbidity Units – unit to measure turbidity. **RAA** = **Running Annual Average** – the average of (4) quarterly samples collected in one year.

pCi/L – Picocuries per liter is a measure of radioactivity in water. A picocurie is 10⁻¹² curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

TT – Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water.

Trihalomethanes – chloroform, Bromochloromethane, dibromochloromethane and bromoform.