

BROWN DEER WATER UTILITY

TREATED WATER QUALITY 2012

LISTED below are the regulated contaminants DETECTED in Milwaukee's drinking water during 2012. *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	0.047 mg/L	0.119 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)	6.8 ug/L	Disinfection by-product.
Chromium, hexavalent	NR	NR	0.22 µg/L	0.41 µg/L	Natural Deposits.
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 ug/L	2ug/L	Natural Deposits. Corrosion of household plumbing systems.
Potassium	NR	NR	1.4 mg/L	1.6 mg/L	Natural Deposits.
Sodium	NR	NR	9.3 mg/L	17.0 mg/L	Natural Deposits.
Di-haloacetonitriles, total	NR	NR	1.8 ug/L	4.1 ug/L	Disinfection by-product
Fluoride	4 mg/L	4 mg/L	0.97 mg/L	1.35 mg/L	Water treatment additive, natural deposits.
Gross Alpha particles	0	15pCi/L	2.7 pCi/L	2.8pCi/l	Natural Deposits
Gross Beta particles	0	50 pCi/L	5.3pCi/L	6.0pCi/L	Natural Deposits
Total Organic Carbon	TT	TT	1.2mg/L	1.4mg/L	Naturally Present
Chlorine, Total	4 mg/L	4 mg/L	.75 mg/L	1.1 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	28 mg/L	Naturally Present
Turbidity	NA	TT<0.3 NTU 95% of the time	0.04 NTU 95% of the time	0.08 NTU One day max	Natural Sediment
Uranium, Total (2011)	0	30 pCi/L	0.23 pCi/L	0.25 pCi/L	Natural Deposits.
Perchlorate	NR	NR	0.11 ug/L	0.12 ug/L	Residual of Disinfection
Radium – Combined (2011)	0 pCi/L	5 pCi/L	1.98 pCi/L	1.99 pCi/L	Natural Deposits.
Tritium, dissolved (2011)	0	20,000 pCi/L	427 pCi/L	544 pCi/L	Natural Deposits
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).

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) **ug/L** microgram per liter, equal to one part per billion (ppb)

NR – not regulated **NTU** – Nephelometric Turbidity Units – unit to measure turbidity.

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.

RAA = Running Annual Average – the average of (4) quarterly samples collected in one year.

Trihalomethanes – chloroform, Bromochloromethane, dibromochloromethane and bromoform.

< - means “less than”