

BROWN DEER WATER UTILITY

TREATED WATER QUALITY 2011

LISTED below are contaminants DETECTED in Milwaukee's drinking water during 2011. All are below levels allowed by state and federal laws. A list of the hundreds of other compounds for which the water was tested but not found can be located at: <http://www.water.mpw.net>

Substance	Ideal Goals (mclg)	Highest Level Allowed (USEPA-MCL)	Median Value	Highest Level Detected	Sources of Contaminant
Aluminum	0.2 mg/L	NR	0.04 mg/L	0.11 mg/L	Water treatment additive; natural deposits
Barium	2 mg/L	2 mg/L	0.02 mg/L	0.02 mg/L	Natural Deposits.
Chromium	100 µg/L	100 µg/L	< 2 µg/L	< 2 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	1.8 mg/L	Natural Deposits.
Sodium	NR	NR	8.8 mg/L	15.9 mg/L	Natural Deposits.
Bromate	10 µg/L	10 µg/L (RAA)	<5 µg/L (RAA)	NR	Disinfection by-product.
Fluoride	4 mg/L	4 mg/L	1.05 mg/L	1.36 mg/L	Water treatment additive, natural deposits.
Total Organic Carbon	TT	TT	1.2mg/L	1.9mg/L	Naturally Present
Chlorine, Total	4 mg/L	4 mg/L	.8 mg/L	1.7 mg/L	Residual of water disinfection.
Haloacetic Acids , Total	NA	60 µg/L	2.4 µg/L	9.4 µg/L	Byproduct of drinking water disinfection.
Trihalomethanes, Total	NA	80 µg/L	10.0 µg/L	17.3 µg/L	Byproduct of drinking water disinfection.
Sulfate	500 mg/L	NR	42 mg/L	50 mg/L	Naturally Present
Turbidity	NA	TT< 0.3 NTU 95% of the time	0.04 NTU 95% of time	0.18 NTU one-day max	Natural Sediment.
Uranium, Total (2008)	0	20 pCi/L	0.23 pCi/L	0.25 pCi/L	Natural Deposits.
Radium – Combined (2008)	0 pCi/L	5 pCi/L	1.98 pCi/L	1.99 pCi/L	Natural Deposits.
Total Coliform Bacteria	0	<5 % of samples/month	<1%	10%	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) **µg/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.

