

BROWN DEER WATER UTILITY

TREATED WATER QUALITY 2005

LISTED below are contaminants DETECTED in Milwaukee's drinking water during 2005. 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: www.mpw.net/pages/waterworks.html.

Substance	Ideal Goals (mclg)	Highest Level Allowed (USEPA-MCL)	Median Value	Highest Level Detected	Sources of Contaminant
Aluminum	0.2 mg/L	NR	0.06 mg/L	0.10 mg/L	Water treatment additive; natural deposits
Barium	2 mg/L	2 mg/L	0.019 mg/L	0.019 mg/L	Natural Deposits.
Chromium	100 ug/L	100 ug/L	2 ug/L	3 ug/L	Natural Deposits.
Copper	1.3 mg/L	1.3 mg/L (AL)	.052mg/L	.246mg/L	Natural Deposits. Corrosion of household plumbing systems.
Lead	0 ug/L	15 ug/L (AL)	<1 ug/L	4ug/L	Natural Deposits. Corrosion of household plumbing systems.
Nickel	100 ug/L	100 ug/L	<1 ug/L	2 ug/L	Metal alloys, electroplating, batteries, chemical production.
Potassium	NR	NR	1.3 mg/L	1.5 mg/L	Natural Deposits.
Sodium	NR	NR	7.4 mg/L	9.2 mg/L	Natural Deposits.
Bromate	10 ug/L	10 ug/L (RRA)	4 ug/L(RRA)	NR	Disinfection by-product.
Fluoride		4 mg/L	1.01 mg/L	1.46 mg/L	Water treatment additive, natural deposits
Total Organic Carbon	TT	TT	1.5 mg/L	3.8 mg/L	Naturally Present
Chlorine, Total		4 mg/L	1.0 mg/L	1.8 mg/L	Residual of water disinfection.
Haloacetic Acids, Total	0 ug/L	60 ug/L	2.8 ug/L	11.2 ug/L	Byproduct of drinking water disinfection.
Total Organic Halides	NR	NR	28 ug/L	54 ug/L	Byproduct of drinking water disinfection.
Trihalomethanes, Total	0 ug/L	80 ug/L	6.3 ug/L	14.2 ug/L	Byproduct of drinking water disinfection.
Sulfate	500 mg/L	NR	30 mg/L	34 mg/L	Naturally Present
Turbidity		TT < 0.3 NTU 95% of the time	0.06 NTU 95% of time	0.29 NTU one-day max	Natural Sediment.
Uranium, Total		20 pCi/L	0.54 pCi/L	0.57 pCi/L	Natural Deposits.
Radium – Combined	0 pCi/L	5 pCi/L	0.7 pCi/L	0.7 pCi/L	Natural Deposits.
Total Coliform Bacteria	0	<5 % of samples/month	0%	0.7%	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

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”

