BROWN DEER WATER UTILITY

TREATED WATER QUALITY 2004

LISTED below are contaminants DETECTED in Milwaukee's drinking water during 2004. *All are below levels allowed by state and federal laws.* Not listed are the hundreds of other compounds for which the water was tested but not found.

Substance	Ideal Goals (mclg)	Highest Level Allowed (USEPA-MCL)	Median Value	Highest Level Detected	Sources of Contaminant
Aluminum	0.2 mg/L	NR	0.08 mg?L	0.15 mg/L	Water treatment additive; natural deposits
Barium	2 mg/L	2 mg/L	0.018 mg/L	0.019 mg/L	Natural Deposits.
Chromium	100 ug/L	100 ug/L	3 ug/L	4 ug/L	Natural Deposits.
Copper	1.3 mg/L	1.3 mg/L (AL)	.099mg/L(AL)	NR	Natural Deposits. Corrosion of household plumbing systems.
Lead	0 ug/L	15 ug/L (AL)	4.8 ug/L(AL)	NR	Natural Deposits. Corrosion of household plumbing systems.
Nickel	100 ug/L	100 ug/L	5 ug/L	6 ug/L	Metal alloys, electroplating, batteries, chemical production.
Potassium	NR	NR	1.4 mg/L	1.5 mg/L	Natural Deposits.
Sodium	NR	NR	7.9 mg/L	10.9 mg/L	Natural Deposits.
Bromate	10 ug/L	10 ug/L	6.5 ug/L (RRA)	NR	Disinfection by-product.
Fluoride		4 mg/L	1.17 mg/L	1.7 mg/L	Water treatment additive, natural deposits
Total Organic Carbon	TT	TT	1.5 mg/L	2.4 mg/L	Naturally Present
Chlorine, Total		4 mg/L	1.0 mg/L	2.2 mg/L	Residual of water disinfection.
Haloacetic Acids (9), Total	0 ug/L	60 ug/L	2.5 ug/L	4.9 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	4 ug/L	12 ug/L	Byproduct of drinking water disinfection.
Sulfate	500 mg/L	NR	28 mg/L	31 mg/L	Naturally Present
Turbidity		TT< 0.3 NTU95% of the time	0.06 NTU	0.16 NTU	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.
SMCL – Secondary Maximum Contaminant Level. – the highest level allowed for aesthetic concerns
Trihalomethanes – chloroform, Bromochloromethane, dibromochloromethane and bromoform.
< - means "less than"