

BROWN DEER WATER UTILITY

TREATED WATER QUALITY 2009

LISTED below are contaminants DETECTED in Milwaukee's drinking water during 2009. 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 | 0.045 mg/L | 0.309 mg/L | Water treatment additive; natural deposits |
| Barium | 2 mg/L | 2 mg/L | 0.021 mg/L | 0.021 mg/L | Natural Deposits. |
| Chromium | 100 µg/L | 100 µg/L | <2 µg/L | 2 µg/L | Natural Deposits. |
| Copper (2008) | 1.3 mg/L | 1.3 mg/L (AL) | .065mg/L | .317 mg/L | Natural Deposits. Corrosion of household plumbing systems. |
| Lead | 0 µg/L | 15 µg/L (AL) | <2 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 | 17.3 mg/L | Natural Deposits. |
| Bromate | 10 µg/L | 10 µg/L (RRA) | 4 µg/L(RRA) | NR | Disinfection by-product. |
| Fluoride | 4 mg/L | 4 mg/L | .77 mg/L | 2.06 mg/L | Water treatment additive, natural deposits. |
| Total Organic Carbon | TT | TT | 1.3 mg/L | 2.6 mg/L | Naturally Present |
| Chlorine, Total | 4 mg/L | 4 mg/L | .8 mg/L | 1.45 mg/L | Residual of water disinfection. |
| Haloacetic Acids , Total | NA | 60 µg/L | 1.2 µg/L | 9.4 µg/L | Byproduct of drinking water disinfection. |
| Trihalomethanes, Total | 0 µg/L | 80 µg/L | 3.6 µg/L | 10.4 µg/L | Byproduct of drinking water disinfection. |
| Sulfate | 500 mg/L | NR | 28 mg/L | 32 mg/L | Naturally Present |
| Turbidity | NA | TT< 0.3 NTU 95% of the time | 0.04 NTU 95% of time | 0.08 NTU one-day max | Natural Sediment. |
| Uranium, Total | 0 | 20 pCi/L | 0.14 pCi/L | 0.18 pCi/L | Natural Deposits. |
| Radium – Combined (2008) | 0 pCi/L | 5 pCi/L | 0.99 pCi/L | 1.1 pCi/L | Natural Deposits. |
| Total Coliform Bacteria | 0 | <5 % of samples/month | <1% | <1% | 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.