# *O. Fred Nelson Water Production Plant*

## *Results of Regulated and Unregulated Characteristics of Kenosha Water Quality*

***(The results meet or surpass all state and federal drinking water standards)***

Additional information on water quality or unregulated contaminants may be obtained by contacting the Kenosha Water Utility at 262-653-4330

| Parameter | Units | Highest Level Detected | Range/Comments | MCL or {MRDL} | MCLG or {MRDLG} | Possible Sources in Water |
|---|---|---|---|---|---|---|
| ***Microbiological Contaminants*** | | | | | | |
| Total Coliform Bacteria | % positive samples | 1 | 1 | presence of coliform bacteria in less than 5% of monthly samples | 0 | naturally present in the environment |
| ***Disinfection Byproducts*** | | | | | | |
| Haloacetic acids | ppb | 10 (avg) | 7 to 12 | 60 | 60 | by-product of disinfection process |
| Total Trihalomethanes | ppb | 30.3 (avg) | 23.8 to 37.9 | 80 | 0 | by-product of disinfection process |
| ***Inorganic Contaminants*** | | | | | | |
| Antimony * | ppb | 0.2 | 0.2 | 6 | 6 | fire retardants, electronics |
| Arsenic * | ppb | 1 | 1 | 10 | n/a | erosion of natural deposits |
| Barium * | ppm | 0.017 | 0.017 | 2 | 2 | erosion of natural deposits |
| Cadmium * | ppb | 0.1 | 0.1 | 5 | 5 | erosion of natural deposits |
| Chromium * | ppb | 1 | 1 | 100 | 100 | erosion of natural deposits |
| Copper * | ppm | 0.13 (AL) | 0 of 31 sites > AL | 1.3 (AL) | 1.3 | corrosion of household plumbing materials |
| Fluoride * | ppm | 1.1 | 1.1 | 4 | 4 | additive to reduce tooth decay |
| Lead * | ppb | 8.40 (AL) | 1 of 31 sites > AL | 15 (AL) | 0 | corrosion of household plumbing materials |
| Nickel * | ppb | 0.98 | 0.98 | 100 | | naturally present in the environment |
| Nitrate as N | ppm | 0.39 | 0.39 | 10 | 10 | runoff from fertilizers |
| Sodium | ppm | 10.00 | 10.00 | n/a | n/a | |
| ***Radioactive Contaminants*** | | | | | | |
| Radium (226+228)** | pCi/l | 0.8 | 0.8 | 5 | 0 | erosion of natural deposits |
| ***Unregulated Contaminants*** | | | | | | |
| Bromodichloromethane | ppb | 9.75 (avg) | 8.40 to 11.00 | n/a | n/a | by-product of disinfection process |
| Bromoform | ppb | 0.15 (avg) | ND to 0.60 | n/a | n/a | by-product of disinfection process |
| Chloroform | ppb | 15.50 (avg) | 11.00 to 22.00 | n/a | n/a | by-product of disinfection process |
| Dibromochloromethane | ppb | 4.88 (avg) | 4.40 to 5.60 | n/a | n/a | by-product of disinfection process |
| Sulfate * | ppm | 24.00 | 24.00 | n/a | n/a | |
| Total Organic Carbon | mg/l | 1.5 (avg) | 0.94 to 2.1 | TT | | naturally present in the environment |
| Total Chlorine | ppm | 1.39 | 1.10 to 1.39 | {4} | {4} | water additive to control microbials |
| Total Hardness | ppm | 142 | 130 to 142 | 500 | | |
| Turbidity | NTU | 0.040 | 0.024 to 0.040 | less than 0.30 | | soil runoff |
| Alkalinity | ppm | 114 | 101 to 114 | **Abbreviations** | | |
| Conductivity | µS/cm | 331 | 265 to 331 | NTU - Nephelometric Turbidity Units | | |
| Ortho-phosphate | ppm | 0.24 | 0.11 to 0.24 | pCi/l picocuries per liter | | µS/cm - microsiemens/centimeter |
| pH | pH units | 7.74 | 7.30 to 7.74 | ppb - parts per billion (ug/l) | | N.D. - not detected |
| Temperature | Fahrenheit | 70 | 36 to 70 | ppm - parts per million (mg/l) | | * tested in 6-2008 **tested in 3-2009 |

**Definitions:**

| | |
|---|---|
| Treatment Technique (TT) - | A required process intended to reduce the level of a contaminant in drinking water. |
| Action Level (AL) - | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water must follow. Action levels are reported at the 90th percentile for homes at greatest risk. |
| Maximum Contaminant Level - (MCL) | The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as system feasible using the best available treatment technology. |
| Maximum Contaminant Level Goal - (MCLG) | The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of |
| Maximum Residual Disinfectant Level - {MRDL} | The level of a disinfectant added for water treatment that may not be exceeded at the consumers tap. |
| Maximum Residual Disinfectant Level Goal - {MRDLG} | The level of a disinfectant added for water treatment below which ther risk to health. MRDLGs are set by the U.S. Environmental Protection Agency. |