

# Whiting Water Department

## Annual Water Quality Report

### 2008

#### Our Commitment to You

Employees work around the clock, seven-days-a-week, 365 days-a-year, to ensure the water delivered to you meets or exceeds Environmental Protection Agency (EPA) standards and is safe to use and consume. This report is a summary of the quality of water provided to you, our customers, in 2008 and is intended to meet federal regulations for the consumer confidence report. Included are details about where your water comes from, what it contains, and how it compares to standards set forth by regulatory agencies. The chart contained in this report shows that all contaminants detected in your water are within EPA guidelines. In 2008 as in years past, your tap water met all EPA and state drinking water health standards.

#### Origin of your Water

Your drinking water originates from Lake Michigan. As water travels over the surface of the land it dissolves naturally-occurring minerals and can pick up substances resulting from the presence of animals or human activity.

Some compounds that may be found in untreated water include: biological contaminants, such as viruses and bacteria; inorganic compounds, such as salts and metals; and organic compounds, such as pesticides and herbicides.

#### Special Information Available

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general public. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on

#### Overview of the Treatment Process

Chlorine is used to disinfect the water and also for taste and odor control. The water is pretreated in the mixing basin to remove organics and other sediments. Powered activated carbon is fed as needed into the water for removal of man-made and natural organic chemicals. The water then flows to the sedimentation basins where the sediments and organics are settled out. The water is then passed through layers of sand and various sizes of gravel in the filters to remove any remaining particles in the water. After the filtration process ortho-polyphosphate is added to aid in corrosion control if needed. This chemical coats the inside of the water mains and household plumbing with a thin coating, setting up a barrier between the water and pipes inhibiting the leaching of lead and copper into the water. Fluoride is also added at this point to aid in the prevention of tooth decay. The clean water is then stored in a

#### Special Note on Lead in Water

clear well until pumped into the pipes of the distribution system.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using the water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## Treated Water Quality Characteristics for 2008

Substance  These are the compounds that were found in our water	Highest level Detected	Highest level Allowed EPA's MCL	Ideal Goals  EPA's MCLG	Sources of Contamination
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### Regulated at the Treatment Plant

Barium (ppb)	21.0	2000	2000	Erosion of natural deposits
Chromium (ppb)	<2.0	100	100	Erosion of natural deposits
Fluoride (ppm)	1.7	4	2	Water additive promoting strong teeth
Nickel (ppb)	6.5	100	100	Erosion of natural deposits
Nitrate (ppm)	0.24	10	10	Erosion of natural deposits
Sodium (ppm)	14.0	NR	NR	Erosion of natural deposits
Turbidity (NTU)	0.20	TT	5	Soil runoff

\*\*\*Note\*\*\* Turbidity monitoring is a measure of the cloudiness of the water and is an indicator filter performance. This level is the average for the year. Lowest percentage was 100%.

### Regulated in the Distribution System

Total Trihalomethanes(ppb)	34.7	80	0	By-product of chlorination
Haloacetic Acids (ppb)	6.4	60	0	By-product of chlorination
Chlorine (as Cl <sub>2</sub> ) (ppm)	0.96	4 MRDL	4 MRDLG	Drinking water disinfectant

\*\*\*Note\*\*\* These levels are the average for the year.

### Regulated at Your Tap

Lead (ppb)	5.6	AL=15	0	Corrosion of household plumbing
Copper (ppb)	18.0	AL=1300	1300	Corrosion of household plumbing

\*\*\*Note\*\*\* Lead and Copper monitoring is required once a year. This is the 90<sup>th</sup> percentile value for 20 samples.

### Unregulated Contaminants

Sulfate (ppm)	27.0	NR	NR	Mineral and Nutrient
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\*\*\*Note\*\*\* Required monitoring so that EPA can determine if a MCL should be set and what that level should be for our monitoring.

### Radioactivity

Radium 228 (pCi/l)	0.3 +/- 1.0	5	0.3	Erosion of natural deposits
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\*\*\*Note\*\*\* Radioactivity monitoring is only required once every four years. This is 2003 data.

**\*\*NOTE\*\*:** The EPA requires monitoring of over 80 drinking water contaminants. Those listed above are the only contaminants detected in your drinking water. For a complete list, contact the Water Dept.

### Key to Abbreviations:

AL - Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

MRDL - Maximum Residual Disinfectant Level. The highest level of disinfectant allowed in drinking water.

MRDLG - Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected health risk.

TT - Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.

ppm - Parts per million. Corresponds to one second of time in 11.6 days.

ppb - Parts per billion. Corresponds to one second of time in 31.7 years.

pCi/L - pico Curies per liter. A measure of the radioactivity in water.

NTU - Nephelometric Turbidity Unit. A measure of the clarity of water.

NR - Not regulated

MCL's are set at very stringent levels. To understand the possible health affects described for many contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

### Customer views welcomed

If you are interested in learning more about the water department and water quality or participating in the decision-making process, there are a number of opportunities available. Questions about water quality can be answered by calling Paul Tumo at 659-0407. Inquiries about policy decisions can be made at the Board of Public Works meetings, which are held at 12:00 Noon on the first and third Monday of each month at City Hall and are open to the public.

Thank you for allowing us to provide you and your family with *SAFE*, clean, quality water this past year. The employees of the Whiting Water Department ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

**No hablo ingles? Telefono 659-6200**