

City of Warrenville Water Quality Report 2007

This report has been comprised and published to meet requirements of the Federal Safe Drinking Water Act. The purpose of the report is to inform customers what is in their drinking water and where it comes from.

This year, as in years past, your tap water met all USEPA drinking water health standards. Our system vigilantly safeguards its groundwater supply, and we are able to report that the department had no violation of a contaminant level or of any other water quality standard in the previous year. This report summarizes the quality of water that we provided last year, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

If you have any questions concerning this report or concerning your water system, please contact Michael Smith, Utility Supt., at 630-393-9050, Monday through Friday. A Committee of the Whole concerning Community Development issues is held once a month at the City Hall at 7 PM. These meetings are published in the local papers and posted on the bulletin board outside of City Hall. Also, you can call City Hall at 630-393-9427 and obtain the meeting dates. Water issues are discussed in open forums on an as need basis.

Our City uses groundwater provided by five wells drilled into the Silurian – Dolomite aquifer. An aquifer is a geological formation that contains water. The wells are drilled to an average depth of 300 feet. The location of the wells are as follows: Well #4 is located on the East boundary of the Winchester Subdivision, Well # 8 is located at the water tower on Country Ridge Dr., across the street from the hardware building, Well # 9 is located at the water tower site at Warrenville Rd. and Lorraine St., Well # 10 is located at Batavia Rd. and Chierice Dr. in the Summerlakes Subdivision, and Well # 11 is located next to Bower School on River Rd.

Your home normally receives a mixture of water from Wells # 10, #9, and #11 that utilize iron removal equipment in the production process, thus removing the iron from the water before it enters the distribution system.

A source water assessment was conducted by the IEPA that indicated the ground water is not vulnerable

to any contaminants. The assessment is available for public viewing at the City Hall.

Some people may be more vulnerable to contaminants in drinking water than the general population. 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. USEPA/CDC guidelines are available from the USEPA Safe Water Drinking Water Hotline at 1-800-426-4791.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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 USEPA Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, and wells. All of Warrenville's tap water is obtained from wells. As water travels over the surface or through the ground, it can dissolve natural occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of: Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban runoff, industrial or domestic wastewater discharges, oil and gas production, or farming; Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water and residential uses; Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems; Radioactive contaminants, which may be naturally occurring .

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water supplies. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Definitions and Abbreviations

Definitions:

MCLG: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

MRDL. Maximum residual disinfectant level. The highest level of disinfectant allowed in the water

MRDLG. Maximum residual disinfectant level goal.

Abbreviations:

nd – not detectable at testing limits.

N/A – not applicable.

ppm – parts per million or milligrams per liter.

ppb – parts per billion or micrograms per liter.

Ppt – parts per trillion

NTU – Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

%<0.5 NTU – Percent samples less than 0.5 NTU.

MFL – Million fibers per liter, used to measure asbestos concentration.

The “**Range of Detections**” column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

About the Data

IRON

This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

SODIUM *

There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If the level is greater than 20 mg/l, and you are on a sodium restricted diet, you should consult a physician.

FLUORIDE

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride Level of 0.9 To 1.2 ppm.

2006 Water Quality Data

Lead and Copper Samples taken in August of 2006. Likely source of contamination is from corrosion of household plumbing. Samples of the wells have not indicated any traces of lead or copper in the water supply.

Lead MCLG	Lead Action Level	Lead 90 th Percentile	# Sites Over AL	Copper MCLG	Copper Action Level	Copper 90 th Percentile	# Sites Over Copper AL
0 ppb	15 ppb	< 5ppb	0	1.3 ppm	1.3 ppm	0.53	0

Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation
Inorganic Contaminants							
Barium	8/7/2006	0.13	0.084-0.13	ppm	2	2	NO
Fluoride	8/7/2006	1.11	.88 – 1.11	ppm	4	4	NO
Disinfectants & Disinfections Byproducts							
TTHMs (Total Trhalomethanes)	8/26/2006	0	N/A	ppb	N/A	80	NO
Total Haloacetic Acids (HAA5)	8/26/2006	0	N/A	ppb	N/A	60	NO
Chlorine	12/31/2006	1.5237	1.49 – 1.152	ppm	MRDL G=4	MRD LG=4	NO
State Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation
Manganese	8/7/2006	18	N/A	ppb	N/A	150	NO
Sodium	8/7/2006	81	27 - 81	ppm	N/A	N/A	NO
Radioactive Contaminants							
Combined Radium	10/24/2005	1.8	1.1 – 1.8	PCI/L	0	5	NO
Synthetic Organic Contaminants (including pesticides and herbicides)							

Benzo (a) Pyrene	11/6/2006	0.04	0.0 – 0.04	ppt	0	200	NO

2006 Violation Summary Table

Rule or contaminant	Violation type	Violation Duration
Chlorine Failure to collect required number of samples for chlorine	Monitoring , Routine (DBP), Minor	10/1/2006 to 10/31/2006

This violation was issued due to an entry that was not filled in on the sample from. The City supplied the I.E.P.A with documentation indicating that chlorine residual was present. Utility Division personnel have received comprehensive training on form completion and the importance of such.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

Likely source for contaminants listed above:

- Nitrate: Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits
- Barium: Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries
- Fluoride: Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
- Manganese: Erosion of naturally occurring deposits.
- Sodium: Erosion from naturally occurring deposits; used in water softener regeneration
- Combined Radium: Erosion of natural deposits.
- Chlorine: Water additive to control microbes.
- Total Haloacetic Acids: By-product of drinking water chlorination.
- TTHMs: By-product of drinking water chlorination.
- Benzo (a) Pyrene: Leaching from linings of water storage tanks and distribution lines

Note: The iron content of the Warrenville water supply as of December 2002 does not exceed 300 ppb which is significantly below the maximum level of 1000 established by the State The wells containing water of these levels of iron are only used as a supply during extreme conditions, the majority of water supplied contains 10 ppb iron content due to iron filtration systems.