

# VILLAGE OF ITASCA

## WATER QUALITY REPORT 2008

Keeping you informed on water quality in your community

### **About this report**

The Village of Itasca wants all consumers to be aware of what is being done to insure that the water you use is safe for you and your family. The Village of Itasca currently meets or exceeds all water quality standards set by the United States and Illinois Environmental Protection Agency. These agencies developed the Safe Drinking Water Act (SDWA), which sets the standards for water quality and monitors compliance. 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 the regulatory agencies.

If you have any questions about this report or concerns about your water system, please contact Glen Sullivan, Water & Wastewater Superintendent, at 630-773-5571. We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of the Village's regularly scheduled board meetings on Tuesday evenings at 7:00 p.m. at the Village Hall, 550 W Irving Park Road. **Copies of this report will be available at the Public Works Department.**

### **Source Water Information**

The Village of Itasca receives Lake Michigan source water from the DuPage Water Commission. This surface water supply is treated by the City of Chicago, sold to the DuPage Water Commission (DWC), and then purchased by the Village for use by residents, businesses and visitors using water from the water supply.

Lake Michigan is the primary source of water used to provide drinking water to the Village of Itasca. The Environmental Protection Agency (EPA) has found the quality of Lake Michigan has improved dramatically over the past 20 years. Since the quality of the raw water source is good, conventional treatment methods of disinfection, coagulation and sedimentation, and sand filtration are adequate in producing water that is free of harmful contaminants.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity. 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 at (800) 426-4791.

### **Contaminants that may be present in source water include:**

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 storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, 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 can be naturally occurring or be the result of oil and gas production and mining activities.

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

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. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

### **Source Water Assessment Availability**

A Source Water Assessment summary is included below for your convenience.

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake. Throughout history there have been extraordinary steps taken to assure a safe source of drinking water in the Chicago land area. From the building of the offshore cribs and the introduction of interceptor sewers to the lock-and-dam system of Chicago's waterways and the city's Lakefront Zoning Ordinance. The city now looks to the recently created Department of the Water Management, Department of the Environment and the MWRDGC to assure the safety of the city's water supply. Also, water supply officials from Chicago are active members of the West Shore Water Producers Association. Coordination of water quality situations (i.e., spills, tanker leaks, exotic species, etc) and general lake conditions are frequently discussed during the association's quarterly meetings. Also, Lake Michigan has a variety of organizations and associates that are currently working to either maintain or improve water quality.

Finally, one of the best ways to ensure a safe source of drinking water is to develop a program designed to protect the source water against potential contamination on the local level. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of the watershed protection activities in this document are aimed at this purpose. Citizens should be aware that everyday activities in an urban setting might have a negative impact on their source water. Efforts should be made to improve awareness of storm water drains and their direct link to the lake within the identified local source water area. A proven best management practice (BMP) for this purpose has been the identification and stenciling of storm water drains within a watershed. Stenciling along with an educational component is necessary to keep the lake a safe and reliable source of drinking water.

## **Definition of Terms**

**Maximum Contaminant Level Goal (MCLG):** *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.*

**Maximum Contaminant Level (MCL):** *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.*

**Level Found:** *This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.*

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

**Date of Sample:** *If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.*

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

**Treatment Technique (TT):** *A required process intended to reduce the level of a contaminant in drinking water.*

**Maximum Residual Disinfectant Level (MRDL):** *The highest level of disinfectant allowed in drinking water.*

**Maximum Residual Disinfectant Level (MRDLG):** *The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.*

## **Abbreviations**

**Avg.:** *Regulatory compliance with some JCLs are based on running annual average of monthly samples.*

**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, or nanograms per liter.*

**ppq:** *parts per quadrillion, or picograms per liter.*

**mg/l:** *milligrams per litre or parts per million, or one ounce in 7,350 gallons of water.*

**ug/l:** *micrograms per litre or parts per billion, or one ounce in 7,350,000 gallons of water.*

**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.*

**mrem/yr:** *millirems per year, used to measure radiation absorbed by the body.*

**pCi/l:** *picocuries per liter, used to measure radioactivity.*

**# pos/mo:** *number of positive samples per month.*

% pos/mo: percent positive samples per month.

## WATER QUALITY TABLE

### ***Microbial Contaminants / City of Chicago Results***

*Turbidity – Regulated at the Water Treatment Plant – Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.*

<b><i>Contaminant (unit of measurement) Typical Source of Contaminant</i></b>	<b><i>MCLG</i></b>	<b><i>MCL</i></b>	<b><i>Level Found</i></b>	<b><i>Range of Detection</i></b>	<b><i>Violation</i></b>	<b><i>Date of Sample</i></b>
TOTAL COLIFORM Bacteria (% pos/mo) Human and animal fecal waste.	0	5%	0.54% in July	n/a		
FECAL COLIFORM AND E. COLI (# pos/mo) Human and animal fecal waste.	0	0	2	n/a		
TURBIDITY (%<0.3 NTU) Soil runoff. Lowest monthly percent meeting limit.	n/a	TT/95%	100%	n/a		
TURBIDITY (NTU) Soil runoff. Highest single measurement.	n/a	TT=1NTUmax	0.58	n/a		

### ***Inorganic Contaminants / City of Chicago Results***

<b><i>Contaminant (unit of measurement) Typical Source of Contaminant</i></b>	<b><i>MCLG</i></b>	<b><i>MCL</i></b>	<b><i>Level Found</i></b>	<b><i>Range of Detection</i></b>	<b><i>Violation</i></b>	<b><i>Date of Sample</i></b>
ARSENIC (ppb) Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.	0	10	0.56	0.52 – 0.56		
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries. Erosion of natural deposits.	2	2	0.018	0.018 – 0.018		
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.41	0.37 – 0.41		
NITRATE & NITRITE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.42	0.37 – 0.42		

### ***Disinfection/Disinfectant By-Products (Stage1) / City of Chicago Results***

<b><i>Contaminant</i></b>	<b><i>Highest Level</i></b>	<b><i>Range of Levels Detected</i></b>	<b><i>Unit of Measurement</i></b>	<b><i>MCLG</i></b>	<b><i>MCL</i></b>	<b><i>Violation</i></b>	<b><i>Likely Source of Contamination</i></b>
CHLORINE (as Cl <sub>2</sub> )	0.77	0.65 – 0.77	ppm	4.0	4.0	No	Drinking water disinfectant.
TOTAL HALOACETIC ACIDS (HAA5)	8.53*	4.6 – 12.3	ppb	n/a	60	No	By-product of drinking water disinfection.
TTHMs (Total Trihalomethanes)	16.5*	9.9 – 24.0	ppb	n/a	80	No	By-product of drinking water disinfection.

TOC (TOTAL ORGANIC CARBON)  
The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.

\* Highest Running Average computed quarterly

### ***Disinfection/Disinfectant By-Products / Village of Itasca Results***

<b><i>Contaminant, Likely Source</i></b>	<b><i>Highest</i></b>	<b><i>Range of Levels</i></b>	<b><i>Unit of</i></b>	<b><i>MCLG</i></b>	<b><i>MCL</i></b>	<b><i>Violation</i></b>	<b><i>Date of Sample</i></b>
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<i>Of Contamination</i>	<i>Level</i>	<i>Detected</i>	<i>Measurement</i>				
TOTAL HALOACETIC ACIDS (HAA5) By-product of drinking water chlorination.	19.31	14.64 - 19.31	ppb	n/a	60	No	11/7/2007
TTHMs (Total Trihalomethanes) By-product of drinking water chlorination.	42.11	19.65 – 42.11	ppb	n/a	80	No	10/9/2007

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.

### **State Regulated Contaminants / City of Chicago Results**

<i>Contaminant (unit of measurement)</i> <i>Typical Source of Contaminant</i>	<i>MCGL</i>	<i>MCL</i>	<i>Level Found</i>	<i>Range of Detection</i>	<i>Violation</i>	<i>Date of Sample</i>
FLUORIDE (ppm) Water additive which promotes strong teeth.	4	4	0.98	0.90 – 0.98		
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	n/a	n/a	7.40	7.30 – 7.40		

Fluoride: Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/ to 1.2 mg/l.

Sodium: There is not a state of 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 you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

### **Radioactive Contaminants / City of Chicago Results**

<i>Contaminant (unit of measurement)</i> <i>Typical Source of Contaminant</i>	<i>MCGL</i>	<i>MCL</i>	<i>Level Found</i>	<i>Range of Detection</i>	<i>Violation</i>	<i>Date of Sample</i>
BETA/PHOTON EMITTERS (pCi/l) Decay of natural and man-made deposits.	0	50	2.000	nd – 2.000		11/05/2001

### **Unregulated Contaminants / City of Chicago Results**

<i>Contaminant (unit of measurement)</i> <i>Typical Source of Contaminant</i>	<i>MCGL</i>	<i>MCL</i>	<i>Level Found</i>	<i>Range of Detection</i>	<i>Violation</i>	<i>Date of Sample</i>
SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	20.6	19.1 – 20.6		

Unregulated Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

### **2007 Violation Summary Table/ Village of Itasca Results**

<i>Rule or Contaminant</i>	<i>Violation Type</i>	<i>Violation Duration</i>
<b>COLIFORM (TCR)</b> <i>Failure to collect the required number of samples.</i>	<i>MONITORING (TCR), ROUTINE MINOR</i>	<i>7/1/2007 to 7/31/2007</i>

**VILLAGE OF ITASCA has taken the following actions specific to the VIOLATION listed above:**  
We have since taken the required samples; the results showed that we are meeting drinking water standards.

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

### Monitoring Requirements Not Met for Village of Itasca

Our water system violated a drinking water standard over the past year. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 7/1/2007 – 7/31/2007 we did not complete all monitoring or testing for Total Coliform and therefore cannot be sure of the quality of our drinking water during that time.*

#### What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for Total Coliform and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were or will be taken
Total Coliform	9	8	July 2007	August 2007

#### What happened? What is being done?

We have since taken the required samples, as described in the last column of the table above. The results showed we are meeting drinking water standards.

For more information, please contact Glen Sullivan at 630-773-5571 or Village of Itasca, 1001 Schiller Street, Itasca, IL, 60143

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by the Village of Itasca

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