



# Village of Mount Prospect Water System

## 2005 Consumer Confidence Report

### Introduction

The Village of Mount Prospect is dedicated to providing you with an adequate and dependable supply of safe drinking water. As part of this effort, we have prepared this Consumer Confidence Report (CCR). This report will provide residents and businesses served by the Village-owned water distribution system with the information necessary to make prudent decisions about how they use tap water. Please note, information in this CCR does not pertain to the Illinois American Water Company water customers. Illinois American Water Company will prepare and distribute a separate CCR for their water customers and they can be reached at 1-800-422-2782.

Information in this report describes water consumed during the 2005 calendar year. **We are happy to report that the Village-owned water system had no water quality standard violations last year.**

### Where do we get our water?

Our water supply comes from Lake Michigan, one of the five Great Lakes. The lake water is treated and purified by the City of Chicago, Department of Water Management (312-744-6635). The finished drinking water is then pumped to the Northwest Suburban Municipal Joint Action Water Agency (NSMJAWA) reservoirs. NSMJAWA then pumps the water to Mount Prospect and six (6) other northwest suburban communities via large water transmission mains. Three of these mains terminate at receiving structures in Mount Prospect. The structures are situated at various locations throughout the Village. Prior to receiving lake water, the Village pumped water from as many as 17 public deep wells located throughout the Village.

By volume, Lake Michigan is the second largest of the Great Lakes. Hydrologically, it is inseparable from Lake Huron. The total shoreline, including all its islands, is almost 1,640 miles long. All 63 miles of shoreline within Illinois are considered to be in good condition.

As water travels over or through the ground to the lake, it can dissolve naturally occurring minerals or radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

*Microbial contaminants* such as viruses and bacteria. These contaminants may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

*Inorganic contaminants* such as salts and metals. These contaminants can occur naturally or they can be the result of urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining operations, or farming.

*Pesticides and herbicides* 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, are by-products of industrial processes and petroleum production. They can also come from gas stations, urban storm water runoff, and septic systems, and

*Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Untreated lake water has the potential to contain these types of contaminants. However, it is important to realize that these materials can be found throughout nature to some degree. Their presence does not necessarily mean that there is a health risk associated with our source water. Rather, the most important factor to consider is how much of a particular contaminant can be found in our source water.

Fortunately, the quality of raw, untreated Lake Michigan water is good. This means that conventional treatment methods, such as disinfection with chlorine, coagulation, and sedimentation with sand filtration can be used effectively to produce large quantities of safe drinking water.

### Has an assessment been made of Lake Michigan Water?

Yes. The Illinois Environmental Protection Agency (IEPA) has implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determines the susceptibility of source waters to contamination. The IEPA has completed the source water assessment for our supply.

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. Throughout history there have been extraordinary steps taken to assure a safe source of drinking water in the Chicagoland 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 Environment and the Metropolitan Water Reclamation District of Greater Chicago 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 associations that are currently working to either maintain or improve water quality.

### **Who decides if water is safe to drink?**

In order to make certain that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA) prescribe regulations that limit the amount of certain contaminants in the water distributed by public water systems. All public water systems, including the City of Chicago and the Village of Mount Prospect, must monitor their systems and comply with these regulations. Failure to do so is a violation of Federal and State laws and can result in severe penalties. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Is Mount Prospect drinking water safe?**

**Yes it is.** Last year, Mount Prospect complied with all of the Federal and State regulations pertaining to the storage and distribution of drinking water. No violations were recorded. The table on Page 3 summarizes the tests that were performed to ensure compliance with water quality standards. Page 4 has additional tables and outlines the definitions associated with this information.

The City of Chicago conducted a number of additional water quality tests as well. In fact, they routinely performed over 70 different water quality tests as part of their raw water treatment process. The results of all of these tests complied with Federal and State drinking water regulations. No violations were recorded. In addition to both the Village and the City of Chicago tests, the Village's water distributor, the Northwest Suburban Municipal Joint Action Water Agency (NSMJAWA) also performs a number of water quality tests.

### **Are there any problems with lead in our water?**

No. Village tests for lead and copper content indicate that there are no unhealthy levels of either contaminant in our drinking water. Presently, the Village tests for lead and copper content once every three (3) years. We collect samples from the taps of 30 private homes. In order to avoid corrective action, the samples at the 90th percentile must be less than the Maximum Contaminant Level (MCL) established for each contaminant. The table on page 3 summarizes the results of our last round of lead and copper testing, which we completed in 2005. We will test for lead and copper again in 2008.

It should be noted that infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than in other homes due to the types of materials used in your home's plumbing system. If you are concerned about elevated lead levels in your water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water. Additional information about lead in drinking water is available from the USEPA's Safe Drinking Water Hotline at 1-800-426-4791. You can also visit them on the web at [www.epa.gov/safewater/hfacts.html](http://www.epa.gov/safewater/hfacts.html).

### **Who can I talk to if I have questions or comments about the Village-owned water system?**

If you have any questions about this report, or would like additional information about the Village-owned water system, please feel free to contact Water/Sewer Superintendent Matt Overeem at 847-870-5640. Or, if you prefer, send an e-mail message to [publicworksdept@mountprospect.org](mailto:publicworksdept@mountprospect.org)

In addition, the Mayor and Board of Trustees of the Village of Mount Prospect hold regular board meetings on the first and third Tuesday of every month. These meetings commence at 7:00 PM in the Village Hall, located at 50 South Emerson Street. Questions or comments about the Village-owned water system may be introduced at any of these meetings.

2005 Village of Mount Prospect Water Quality Testing Results							
SUBSTANCE (UNITS)	MCLG	MCL	AMOUNT	RANGE OF DETECTION	VIOLATION NOTED	DATE Ø SAMPLED	TYPICAL SOURCE OF CONTAMINATION
<b>Regulated And Tested For In The Village-Owned Water Distribution System</b>							
Microbial Substance Total Coliform (TC) (%pos./mo.)	0	Presence in >5% of monthly samples	2-1/2% (1 sample)	NA	None		Naturally present in the environment
Microbial Substance Fecal Coliform (FC) (#pos./mo.)	0	A routine and a repeat sample are TC positive and one is also FC or <i>E. Coli</i> positive	2-1/2% (1 sample)	NA	None		Naturally present in the environment
Total Trihalomethanes (ppb)	0	80	38.5 (highest value)	13.3-38.5	None	7/21/2005	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	NA	60	18.9 (highest value)	5.9-19.1	None	7/21/2005	By-product of drinking water chlorination
Ⓢ Total Trihalomethanes (ppb)	0	80	16.100 (highest value)	10.000-22.500	None	8/8/2005	By-product of drinking water chlorination
Ⓢ Total Haloacetic Acids (ppb)	NA	60	8.350 (highest value)	5.500-10.700	None	8/8/2005	By-product of drinking water chlorination
Ⓢ Chlorine (as CL2) (ppm)	4.0	4.0	0.6961 (highest value)	0.6468-0.6961	None	12/31/2005	Drinking water disinfectant
<b>Regulated And Tested For At The Customers' Tap (Initial sample of 30 homes)</b>							
Copper (ppm)	1.3	Action Level = 1.3 ppm	0.250	0 exceeding AL	None	07/2005	Corrosion of household plumbing systems; Erosion of natural deposits and leaching of wood preservatives.
Lead (ppb)	0	Action Level = 15 ppb	<5	0 exceeding AL	None	07/2005	Corrosion of household plumbing systems; Erosion of natural deposits.
<b>Regulated and Tested For By The City Of Chicago (State Regulated And Inorganic Substances)</b>							
Ⓢ Turbidity (NTU) Highest single measurement	NA	TT = 1 NTU max	0.095 NTU	.08-0.12	None		Soil runoff
Ⓢ Turbidity (%<0.3 NTU)	NA	TT	100.0	NA	None		Soil runoff
Ⓢ Barium (ppm)	2	2	0.021	0.020 – 0.022	None	1/3/2005	Discharge from drilling wastes and erosion of natural deposits
Ⓢ Beta / Photon Emitters (pCi/l)	0	50	2.00	ND – 2.000	None	11/05/2001	Decay of natural and man-made deposits.
Ⓢ Chromium (ppb)	100	100	5.6	100	None	1/3/2005	Discharge from steel and pulp mills; Erosion of natural deposits
Ⓢ Fluoride (ppm)	NA	NA	0.959	0.920 – 1.03	None	1/3/2005	Erosion of natural deposits; Water additive that promotes dental health
Ⓢ Nitrate (as Nitrogen) (ppm)	10	10	0.340	ND - 0.340	None	4/26/2005	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Ⓢ Nitrate & Nitrite (ppm)	10	10	0.340	ND - 0.340	None	4/26/2005	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Ⓢ Sodium (ppm)	NA	NA	7.50 highest value	7.300 – 7.500	None	1/3/2005	Erosion of natural deposits; Used as water softener
<p>Ⓢ If a date appears, the IEPA requires monitoring for this substance less than once per year because the concentrations do not frequently change. No date indicates monitoring was done during the current CCR reporting year. Ⓢ This testing was performed by the City of Chicago (not the Village of Mount Prospect).</p> <p>Sulfate is an unregulated contaminant monitored by the City of Chicago who reports 26.700 ppm found in the latest sample. Sulfate is a result of erosion of natural deposits.</p> <p>TOC (Total Organic Carbon) The percentage of TOC removal was measured each month and the system met all TOC removal requirements of the IEPA.</p>							

### Definitions

- MCLG - Maximum Contaminant Level Goal: 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: The highest level of a known contaminant allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.
- ppm - Parts Per Million (same as mg/l)
- ppb - Parts Per Billion (same as ug/l)
- #pos/mo - This represents the number of positive samples per month.
- %pos/mo - This represents the percentage of positive samples per month.
- AL - Action Level: The concentration of a contaminant that triggers treatment or other required actions by the water supply.
- ND - Not Detectable: Not found at the testing limits.
- NA - Not Applicable.
- TT - Treatment Technique.
- MFL - Million fibers per liter
- ppt - parts per trillion, or nanograms per liter.
- ppq - parts per quadrillion, or picograms per liter.
- mrem/year - million fibers per liter
- %<0.5 NTU - Percent of samples less than .5 NTU.
- "Amount" column is an average of all sample result data collected during the CCR calendar year.
- NTU - Nephelometric Turbidity Unit, used to measure cloudiness in the drinking water.
- "Range of Detections" represents a range of individual sample results, from lowest to highest, taken during the CCR calendar year.
- "Date of Sample" represents whether the sample was collected during the CCR calendar year or the last time IEPA required samples to be collected. If no date appears, then the sample was collected during the reporting year.
- "pCi/L" - Picocuries per liter, used to measure radioactivity.
- Turbidity - This is a measurement of how cloudy the water appears. It is monitored because it is a good indicator of water quality and the effectiveness of filtration systems and disinfectants.

### Vulnerable Populations

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

### Important Note

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline (SDWH) at 1-800-426-4791.

You may also obtain additional information from the USEPA's drinking water website ([www.epa.gov/safewater](http://www.epa.gov/safewater)).

### En Espanol

La ciudad de Mount Prospect continua ofreciendo la mejor calidad de agua y servicios a nuestros clientes. Parte de estos servicios es proveer información acerca del estado presente y futuro del agua. En el folleto "Confianza al Consumido" se da suficiente información para que usted pueda tomar decisiones con respecto al suministro y al uso del agua. Este informe es un requisito de la enmendadura del "Safe Drinking Water Act" de 1996, administrada por las agencias "United States Environmental Protection Agency" (USEPA) y "Illinois Environmental Protection Agency" (IEPA). Si usted tiene alguna pregunta acerca de la calidad del agua, por favor llame al teléfono (847) 870-5355.

### VIOLATION SUMMARY TABLE

No violations were issued during this CCR year.

### Additional copies of this report are available at:

Public Works Facility, 1700 West Central Road  
 Mount Prospect Public Library, 10 South Emerson Street

Village Hall, 50 South Emerson Street  
 Central Community Center, 1000 West Central Road