



# Village of Mount Prospect Water System

## 2006 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 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.

This report is a requirement of the 1996 Safe Drinking Water Act amendments. It summarizes where your water came from, what it was made of, and how it compared to the standards established by regulatory agencies. Information about water consumed during the reporting year will be made available in a CCR scheduled for distribution during the following year. CCRs will be published in July of each year. Information in this report describes water consumed during the 2006 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

*Inorganic contaminants* such as salts and metals, which may be naturally occurring or result from urban stormwater 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 stormwater runoff and residential uses.

*Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. They can also come from gas stations, urban stormwater runoff, and septic systems, and

*Radioactive contaminants*, which may 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.

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. No violations were recorded. The results of NWSMJAWA and the City of Chicago's analyses are available to the public and are on file at the Mount Prospect Public Works Facility.

### **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. These samples are then sent to IEPA laboratories in Champaign, Illinois for analysis. 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 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 it tested at a local laboratory. Flushing your tap for 2 minutes before using the water will also reduce your risk of lead exposure. 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 [movereem@mountprospect.org](mailto:movereem@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. The Village Hall is located at 50 South Emerson Street. Questions or comments about the Village-owned water system may be introduced at any of these meetings.

### **Has an assessment been made of Lake Michigan water?**

Yes. The Illinois Environmental Protection Agency (IEPA) completed a Source Water Assessment Program (SWAP). The IEPA implemented the SWAP to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determines the susceptibility of the source water to contamination. 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. Further information regarding our source water assessment; please contact the City of Chicago, Department of Water Management at 1-312-744-6635 or the Northwest Suburban Municipal Joint Action Water Agency at 1-847-891-4083.

### **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's 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.

2006 Village of Mount Prospect Water Quality Testing Results							
SUBSTANCE (UNITS) Agency	MCLG	MCL	AMOUNT	RANGE OF DETECTION	VIOLATION NOTED	DATE SAMPLED	TYPICAL SOURCE OF CONTAMINATION
<b>Regulated And Tested For In The Village-Owned Water Distribution System or NSMJAWA</b>							
Microbial Substance Total Coliform (TC) (%pos/mo.)	0	Presence in < 5% samples	0	NA	None		Naturally present in the environment
Microbial Substance Fecal Coliform (FC) (#pos/mo.)	0	0	0	NA	None		Naturally present in the environment
Total Trihalomethanes (ppb) Village of Mount Prospect	NA	80	29.2 (highest value)	13 - 29.2	None	7/25/2006	By-product of drinking water chlorination
Total Haloacetic Acids (ppb) Village of Mount Prospect	NA	60	18.3 (highest value)	8 - 18.3	None	7/25/2006	By-product of drinking water chlorination
Total Trihalomethanes (ppb) NSMJAWA	NA	80	29.8 (highest value)	22.8 - 29.8	None	7/26/2006	By-product of drinking water chlorination
Total Haloacetic Acids (ppb) NSMJAWA	NA	60	16.9 (highest value)	12.7 - 16.9	None	7/26/2006	By-product of drinking water chlorination
<b>Regulated And Tested For At The Customers' Tap ① (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.
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</b>							
Total Trihalomethanes (ppb) 16.0 is the Highest Running Average computed quarterly	NA	80	20.8 (highest value)	9.40 - 20.8	None	7/25/2006	By-product of drinking water chlorination
Total Haloacetic Acids (ppb) 8.88 is the Highest Running Average computed quarterly	NA	60	11.3 (highest value)	6.70 - 11.3	None	7/25/2006	By-product of drinking water chlorination
Chlorine (as CL2) (ppm)	MRDLG= 4.0	MRDL=4.0	0.664 (highest value)	0.638-0.664	None	12/31/2006	Water additive used top control microbes
Turbidity (NTU) Highest single measurement	NA	TT = 1 NTU max	0.15 NTU	0.15	None		Soil runoff
Turbidity (%<0.3 NTU) Lowest monthly percentage reporting limit.	NA	TT/95%	100.0	NA	None		Soil runoff
Barium (ppm)	2	2	0.020	0.020 - 0.020	None	1/10/2006	Discharge from drilling wastes, discharge from metal refineries and erosion of natural deposits
Boron (ppb)	NA	NA	18.0	14.0 - 18.0	None	1/10/2006	Erosion of naturally occurring deposits; Used in detergents and as a water softener; Used in production of glass, cosmetics, pesticides, fire retardants, and for leather tanning
Fluoride (ppm)	4	4	0.98	0.89 - 0.98	None	1/10/2006	Erosion of natural deposits; Water additive that promotes dental health
Nitrate (as Nitrogen) (ppm)	10	10	0.340	0.30 - 0.340	None	5/2/2006	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate & Nitrite (ppm)	10	10	0.350	0.30 - 0.350	None	5/2/2006	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	NA	NA	6.80 (highest value)	6.70 - 6.80	None	1/10/2006	Erosion of naturally occurring deposits; Used in water softener regeneration
Sulfate (ppm)	NA	NA	28.1	27.2 - 28.1	None		Erosion of naturally occurring deposits.
Beta/Photon Emitters	0	50	2.000	nd - 2.000	None	11/05/2001	Decay of natural and man-made deposits.

① 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.

## 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.
- %<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 our filtration system and disinfectants.
- Sodium There is no MCL for sodium. However, individuals on a sodium restricted diet should consider consulting a physician about this level of sodium in the water.

### 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.

### 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

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

## 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

Village Hall, 50 South Emerson Street

Mount Prospect Public Library, 10 South Emerson Street