



# Village of Mount Prospect Water System

## 2012 CONSUMER CONFIDENCE REPORT

### SOURCE WATER CONTAMINANTS

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. Contaminants that may be present 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 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 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 may 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.

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. Food and Drug Administration (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.

For more information about contaminants and potential health effects, or the USEPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants, call the USEPA's Safe Drinking Water Hotline at **800/426-4791**.

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 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 **2012** calendar year. **We are happy to report that the Village-owned water system had no water quality standard violations last year.**

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 United States Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at 800/426-4791.

### 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. Two of these mains terminate at three 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. The Village maintains only five (5) remaining wells for standby or emergency use. By volume, Lake Michigan is the second largest of the Great Lakes and third largest by volume. Hydrologically, it is inseparable from Lake Huron. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive materials. It can also pick up substances resulting from the presence of animals or from human activity.

Untreated lake water has the potential to contain 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) 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.

For further information regarding our source water assessment, please contact the City of Chicago, Department of Water Management at **312/744-6635** or the Northwest Suburban Municipal Joint Action Water Agency at **773/686-0077**.

### WHO DECIDES IF WATER IS SAFE TO DRINK?

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the IEPA prescribes regulations that limit the amount of certain contaminants

## 2012 VILLAGE OF MOUNT PROSPECT WATER QUALITY TESTING RESULTS

### REGULATED AND TESTED FOR IN THE VILLAGE-OWNED WATER DISTRIBUTION SYSTEM\*

SUBSTANCE (UNITS) Agency	MCLG	MCL	AMOUNT	RANGE OF DETECTION	VIOLATION DETECTION	DATE SAMPLED	TYPICAL SOURCE OF CONTAMINATION
Total Coliform Bacteria (TC) (%pos/mo.)	0	Presence in < 5% samples	0	NA	None		Naturally present in environment; human and animal fecal waste
Fecal Coliform (FC) and E. Coli (#pos/mo.)	0	0	0	NA	None		Naturally present in environment; human and animal fecal waste
Total Trihalomethanes THHM (ppb)	NA	80	40 (highest value)	26.7-54.4	None		By-product of drinking water disinfection
Haloacetic Acids - HAA5 (ppb)	NA	60	15 (highest value)	7.23-20.23	None		By-product of drinking water disinfection
Chlorine (as Cl2) (ppm)	MRDLG=4.0	MRDL=4.0	0.8 (highest value)	0.6988-0.8368	None	12/31/12	Water additive used to control microbes

### REGULATED AND TESTED AT THE VILLAGE'S STANDBY EMERGENCY WELLS\*°

SUBSTANCE (UNITS) Agency	MCLG	MCL	AMOUNT	RANGE OF DETECTION	VIOLATION DETECTION	DATE SAMPLED	TYPICAL SOURCE OF CONTAMINATION
Barium (ppm)	2	2	0.0354	0.0243 - 0.0354	None		Discharge from drilling wastes; discharge from metal refineries; and erosion of natural deposits
Fluoride (ppm)	4	4.0	1.97	1.02 - 1.97	None		Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Iron (ppm)		1.0	0.607	0.361 - 0.607	None		This contaminant is not currently regulated by the USEPA, however, the state regulates; erosion of natural deposits
Manganese (ppb)	150	150	22	0 - 22	None		This contaminant is not currently regulated by the USEPA, however, the state regulates; erosion of natural deposits
Sodium (raw water) (ppm)			82	31 - 76	None		Erosion from naturally occurring deposits; used as water softener
Combined Radium (226/228) (pCi/L)	0	5	8.5	8 - 8.5	None	08/09/10	Erosion of natural deposits
Gross Alpha excluding radon and uranium	0	15	24.4	10.5-24.4	None	08/09/10	Erosion of natural deposits
Uranium (ug/l)	0	30	2.235	2.235 - 2.235	None	08/09/10	Erosion of natural deposits
Arsenic (ppb)	0	10	1.48	0-1.48	None		Erosion of natural deposits

### REGULATED AND TESTED FOR AT THE CONSUMERS' TAP\* (SAMPLE OF 30 HOMES)

SUBSTANCE (UNITS) Agency	MCLG	MCL	AMOUNT	RANGE OF DETECTION	VIOLATION DETECTION	DATE SAMPLED	TYPICAL SOURCE OF CONTAMINATION
Copper (ppm)	1.3	Action Level = 1.3 ppm	1.15 (highest value)	0 exceeding AL	None	07-2011	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	0	Action Level = 15 ppb	11.8 (highest value)	0 exceeding AL	None	07-2011	Corrosion of household plumbing systems; erosion of natural deposits

in the water provided by public water systems. 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 tables on page 2 and 3 summarize the tests that were performed to ensure compliance with water quality standards. Page 4 outlines the definitions associated with this information.

The City of Chicago conducted a number of additional voluntary water quality tests. Also, in compliance with the provisions of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), the City of Chicago monitored for Cryptosporidium, Giardia, E. Coli, and turbidity, a process that began in 2006. 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 NSMJAWA and the City of Chicago's analyses are available to the public.

## REGULATED AND TESTED FOR BY THE CITY OF CHICAGO OR BY NSMJAWA\*

SUBSTANCE (UNITS) Agency	MCLG	MCL	AMOUNT	RANGE OF DETECTION	VIOLATION DETECTION	DATE SAMPLED	TYPICAL SOURCE OF CONTAMINATION
Total Trihalomethanes – TTHM (ppb) Highest Running Annual Average Computed – NSMJAWA	NA	80	30	28.2-32.5	None		By-product of drinking water disinfection
Haloacetic Acids – HAA5 (ppb) Highest Running Annual Average Computed -NSMJAWA	NA	60	16	14.2-18.2	None		By-product of drinking water disinfection
Chlorine/Chloramines (ppm) – NSMJAWA	MRDLG= 4.0	MRDL=4.0	0.9 (highest value)	0.7-1.05	None	12/31/12	Water additive used to control microbes
Turbidity (NTU) Highest single measurement City of Chicago	NA	TT = 1 NTU max	0.69 NTU	NA	Routine Monitoring		Soil runoff
Turbidity (%≤0.3 NTU) Lowest monthly percent meeting limit – City of Chicago	NA	TT (95%≤0.3NTU)	99.7%	99.7% – 100%	Routine Monitoring		Soil runoff
Barium (ppm) City of Chicago	2	2	0.0204	0.0194-0.0204	None		Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm) City of Chicago	4	4	0.85	0.84-0.85	None		Erosion of natural deposits; water additive that promotes strong teeth
Nitrate (as Nitrogen) (ppm) City of Chicago	10	10	0.34	0.34-0.34	None		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite (ppm) City of Chicago	10	10	0.34	0.34-0.34	None		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm) City of Chicago	NA	NA	7.07 (highest value)	6.88-7.07	None		Erosion from naturally occurring deposits; used in water softener regeneration
Sulfate (ppm) City of Chicago	NA	NA	17.6	13.4-17.6	None		Erosion of natural deposits
Combined Radium (226/228) (pCi/L) City of Chicago	0	5	1.38	1.300 – 1.380	None	03-17-2008	Erosion of natural deposits
Arsenic (ppb) City of Chicago	0	10	0.67	0.52-0.67	None		Erosion of natural deposits
Gross Alpha (pCi/L) excluding radon and uranium City of Chicago	0	15	0.88	0.090 – 0.880	None	03-17-2008	Erosion of natural deposits

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

\*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.

°No water was pumped into the water distribution system from emergency standby wells during the reporting period.

### VIOLATION SUMMARY TABLE

**No violations were issued to the Village of Mount Prospect during this CCR year.**

The City of Chicago received a Minor Routine Monitoring violation of the Individual Filter Effluent Turbidity Monitoring Program. There were no health effects from this, and the City of Chicago installed a new low level turbidity detection alarm to ensure continuous filter effluent turbidity monitoring without interruption.



## DEFINITIONS

**MCLG** – Maximum Contaminant Level Goal: The level of a contaminant in drinking water, 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 contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

**MRDLG** – Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**MRDL** – Maximum Residual Disinfectant Level. The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**ppm** – Parts Per Million (same as mg/l) or one ounce in 7,350 gallons of water.

**ppb** – Parts Per Billion (same as ug/l) or one ounce in 7,350,000 gallons of water.

**ppt** – Parts per Trillion or nanograms per liter.

**ppq** – Parts per quadrillion or pictograms per liter.

**#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.

**%≤0.3 NTU** – Percent of samples less than or equal to .3 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** 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.

## 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.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Mount Prospect is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

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 2 summarizes the results of our last round of lead and copper testing, which we completed in 2011. We will test for lead and copper again in the summer of 2014.

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 **800/426-4791**. You can also visit them on the web at [www.epa.gov/safewater/facts.html](http://www.epa.gov/safewater/facts.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 p.m. 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.

## EN ESPAÑOL

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 **847/870-5640**.

## COPIES OF THIS REPORT ARE AVAILABLE ONLINE:

<http://www.mountprospect.org/Modules/ShowDocument.aspx?documentid=2836>

## OR AT THE FOLLOWING LOCATIONS:

Public Works Facility, 1700 W. Central Rd.

Village Hall, 50 S. Emerson St.