

VILLAGE OF MOUNT PROSPECT

2016

WATER QUALITY 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 2016 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 USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

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 at the Jardine Water Purification Plant 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 area, Lake Michigan is the third largest of the Great Lakes and second largest by volume. Hydrologically, Lake Michigan is inseparable from Lake Huron. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive materials. It can also pick up substances resulting from the presence of animals or from human activity.

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 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, and may also come from gas stations, urban stormwater 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.



**Village of Mount Prospect Water System
2016 Consumer Confidence Report**

2016 Village of Mount Prospect Water Quality Testing Results

2016 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
Regulated And Tested For In The Village-Owned Water Distribution System ¹							
Total Coliform Bacteria (TC) (%pos/mo.)	0	Presence in < 5% samples	3.6	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)	18.96-48.6	None	2016	By-product of drinking water disinfection
Haloacetic Acids -HAA5 (ppb)	NA	60	18 (highest value)	9.4 – 22	None	2016	By-product of drinking water disinfection
Chlorine (as CL ₂) (ppm)	MRDLG= 4	MRDL=4	0.9 (highest value)	0.8– 1	None	12/31/2016	Water additive used to control microbes
Regulated And Tested For At The Village's Standby Emergency Wells ^{1, 2}							
Barium (ppm)	2	2	0.0362	0.0236 – 0.0362	None	2015	Discharge from drilling wastes; discharge from metal refineries and erosion of natural deposits
Fluoride (ppm)	4	4.0	1.97	1.04 – 1.97	None	07/12/2015	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Iron (ppm)		1.0	1.23	0.268 – 1.23	None	07/12/2015	This contaminant is not currently regulated by the USEPA, however, the state regulates. Erosion of natural deposits.
Manganese (ppb)	150	150	26.1	0 – 26.1	None	07/12/2015	This contaminant is not currently regulated by the USEPA. However the state regulates erosion of natural deposits.
Sodium (raw water) (ppm)	NA	NA	71	32.8 - 71	None	07/12/2015	Erosion from naturally occurring deposits; Used in water softener regeneration.
Combined Radium (226/228) (pCi/L)	0	5	8.7	4.9 – 8.7	None	2016	Erosion of natural deposits
Gross Alpha excluding radon and uranium	0	15	3.3	0 – 3.3	None	2016	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	7/15/2012	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Nitrate (measured as Nitrogen) (ppm)	10	10	ND	NA	None	2014	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (measured as Nitrogen) (ppm)	1	1	0.014	0-0.014	None	04/05/2015	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Lindane (ppt)	200	200	11 (highest value)	0 - 11	None	2015	Runoff/ leaching from insecticides used on cattle, lumber, gardens

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 to drink, USEPA 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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Violation Summary Table

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

DEFINITIONS

AL - Action Level. The concentration of a contaminant that triggers treatment or other required actions by the water supply.

Avg – Average. Regulatory compliance with some MCLs is based on running annual average of monthly samples.

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 contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

mg/l – milligrams per liter, see ‘ppm’

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.

NA - Not Applicable

ND - Not detectable at testing limits

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

pCi/L – Picocuries per liter, used to measure radioactivity.

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

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

ppq – Parts per quadrillion or pictograms per liter

ppt – Parts per Trillion or nanograms per liter

TT - Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water

#pos/mo - This represents the number of positive samples per month

%pos/mo - This represents the percentage of positive samples per month

%< 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.

“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.

Turbidity - This is a measurement of the cloudiness of the water caused by suspended particles. 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.



2016 Village of Mount Prospect Water Quality Testing Results

2016 Village of Mount Prospect Water Quality Testing Results

Regulated And Tested For At The Customers' Tap ¹ (Sample of 30 homes)

Copper (ppm)	1.3	Action Level = 1.3 ppm	1.04 (highest value)	0 exceeding AL	None	07-2014	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	0	Action Level = 15 ppb	9.04 (highest value)	0 exceeding AL	None	07-2014	Corrosion of household plumbing systems; Erosion of natural deposits

Regulated and Tested For By The City Of Chicago or by NSMJAWA ¹

Total Trihalomethanes – THHM (ppb) Highest Running Annual Average Computed - NSMJAWA	NA	80	41	32.4 – 41.2	None	2016	By-product of drinking water disinfection
Haloacetic Acids - HAA5 (ppb) Highest Running Annual Average Computed - NSMJAWA	NA	60	18	16.7 – 18.3	None	2016	By-product of drinking water disinfection
Chlorine (ppm) NSMJAWA	MRDLG ² 4.0	MRDL=4.0	1 (highest value)	0.82 – 1.15	None	12/31/16	Water additive used to control microbes
Turbidity (NTU) Highest single measurement City of Chicago	NA	TT = 1 NTU max	0.16 NTU	NA	Routine Monitoring		Soil runoff
Turbidity (%<0.3 NTU) Lowest monthly percent meeting limit – City of Chicago	NA	TT (95%≤0.3NTU)	100%	100% - 100%	Routine Monitoring		Soil runoff
Barium (ppm) City of Chicago	2	2	0.0206	0.0196 - 0.0206	None		Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm) City of Chicago	4	4	0.78	0.62 – 0.78	None		Water additive that promotes strong teeth
Nitrate (as Nitrogen) (ppm) City of Chicago	10	10	0.46	0.40 - 0.46	None		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Nitrate & Nitrite (as Nitrogen) (ppm) City of Chicago	10	10	0.46	0.40 - 0.46	None		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm) City of Chicago	NA	NA	8.92 (highest value)	8.49 – 8.92	None		Erosion from naturally occurring deposits; Used in water softener regeneration
Sulfate (ppm) City of Chicago	NA	NA	25.7	25.0 – 25.7	None		Erosion from naturally occurring deposits;
Combined Radium (226/228) (pCi/L) City of Chicago	0	5	0.84	0.50-0.84	None	2/11/2014	Decay of natural and man-made deposits
Gross Alpha (pCi/L) excluding radon and uranium City of Chicago	0	15	6.6	6.1-6.6	None	2/11/2014	Decay of natural and man-made deposits
TOC (Total Organic Carbon) City of Chicago	The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.						

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.

² No water was pumped into the water distribution system from emergency standby wells during the reporting period.

Cryptosporidium, Giardia and E.coli is monitored by the City of Chicago in its water quality program and in compliance with the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) Round 2. No Cryptosporidium or Giardia has been detected.

SUBSTANCE (UNITS) Agency	MCLG	MCL	AMOUNT	RANGE OF DETECTION	VIOLATION NOTED	DATE SAMPLED	TYPICAL SOURCE OF CONTAMINATION
UCMR3 Compliance Monitoring ¹							
In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA; the Village or the City of Chicago has monitored for 28 contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act. The monitoring results were reported to the EPA. The list of UCMR3 contaminants that the Village or City of Chicago has monitored included volatile organic chemicals, metals, perfluorinated compounds, hormones, 1,4-dioxane and chlorate. The contaminants that were detected by either the City of Chicago or the Village are listed below.							
Chromium (ppb) City of Chicago	100	100	0.3	0.2 - 0.3	None	2015	Naturally occurring element. Used in making steel and other alloys
Village	100	100	0.8	0.3 - 0.8	None	2015	
Molybdenum (ppb) City of Chicago	NA	NA	1.1	1.0 -1.1	None	2015	Naturally occurring element, found in ores and present in plants
Village	NA	NA	1.1	1.1	None	2015	
Strontium (ppb) City of Chicago	NA	NA	120	110 -120	None	2015	Naturally occurring element, has been used in cathode ray TVs to block x-ray emissions
Village	NA	NA	118.6	102 - 118.6	None	2015	
Vanadium (ppb) City of Chicago	NA	NA	0.2	0.2 - 0.2	None	2015	Naturally occurring metal. Vanadium pentoxide is used as a catalyst and a chemical intermediate
Village	NA	NA	0.3	0.3 - 0.3	None	2015	
Chromium-6 or Hexavalent Chromium (ppb) City of Chicago	NA	NA	0.19	0.18 - 0.19	None	2015	Naturally occurring element. Used in making steel and other alloys
Village	NA	NA	0.22	0.19 – 0.22	None	2015	
4-Androstene-3, 17-Dione (ppb) City of Chicago	NA	NA	0.0008	0.0006-0.0008	None	2015	Steroidal hormone, naturally produced in the human body and used as an anabolic steroid and a dietary supplement
Testosterone (ppb) City of Chicago	NA	NA	0.0001	0.0001-0.0001	None	2015	Androgenic steroid, naturally produced in the human body; and used in pharmaceuticals
Cobalt (ug/L) Village	NA	NA	< 1	< 1	None	2015	Naturally occurring element found in the earth's crust and at low concentrations in seawater and in some surface and ground water

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.

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 Public Works Director, Sean Dorsey at 847/870-5640, or e-mail 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. 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.

Additional copies of this report will be available at:

- Public Works Facility, 1700 W. Central Road
- Mount Prospect Public Library, 10 S. Emerson Street
- Village Hall, 50 S. Emerson Street
- Community Connections Center, 1711 W Algonquin Road

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.





Has an assessment been made of Lake Michigan water?

Yes. The Source Water Assessment for our water supply has been completed by the Illinois Environmental Protection Agency (IEPA). The 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.

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 1-773-686-0077. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the IEPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

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 which limit the amount of certain contaminants 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 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.

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.

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 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 <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 3 summarizes the results of our last round of lead and copper testing, which we completed in 2014. We will test for lead and copper again in the summer of 2017.

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 <http://www.epa.gov/safewater/lead>.