

2016 Village of Melrose Park
RE: 0311860 Consumer Confidence
Annual Water Quality Report
January 1 to December 31, **2015**

This publication conforms to the new federal regulation under the Safe Drinking Water Act that requires water utilities to provide a detailed water quality report to each of their customers annually. The Village of Melrose Park must provide you with this information. The Village also believes that knowledgeable customers are the Village's best allies in support of improving high drinking water standard

If you have any questions relating to your water supply, and this report, please contact Mr. Mike Carpanzano, Water Superintendent (708-531-5360).

SPANISH NOTICE

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

The report outlines the processes involved in delivering to you the highest quality drinking water available.

1. Where does my water come from?
2. How is my water treated and purified?
3. How safe is my drinking water?

Source Water (mandatory)

Village of Melrose Park drinking water source.

Lake Michigan is the surface water supply used to provide drinking water for Chicago and 123 suburban communities. The Environmental Protection Agency (EPA) has found that the quality of Lake Michigan has improved dramatically over the past 21 years. Lake Michigan, by volume, is the second largest Great Lake and the only one located totally within the United States. It serves as a source of drinking water, as a place for swimming and fishing, and as a scenic wonderland. Sources of drinking water used for both tap water and bottled water can pick up contaminants as water travels over the surface of the land or through the ground. The drinking water source is vulnerable to industrial waste and runoff from surrounding lands. Potential sources of pollution such as pesticides, herbicides, radioactive materials, and organic and inorganic petroleum and gas production by-products can impact the source water. We do not have indications of the presence of these contaminants at this time, mainly because of restrictions, which prohibit industrial effluents from entering Lake Michigan; Sewage treatment plant effluents are not discharged into the lake, thereby reducing the threat of microbial contamination. All 63 miles of shoreline within Illinois are now considered to be in good condition. The Illinois EPA Office of Groundwater will be doing a source water assessment within the next three years. When completed, all sources of Pollutants into Lake Michigan will be identified and there will be information regarding the source water's susceptibility to contaminants based on the findings of the assessment. Since the quality of the raw water source is good, conventional treatment methods of disinfection, coagulation and sedimentation, and sand filtration are adequate for producing water that is free of harmful contaminants.

How is My Water Treated and Purified?

The City of Chicago Water Department provides the water treatment necessary to safeguard the water delivered to Melrose Park. Water is taken from Lake Michigan at several water inlets located about 3 miles from shore. Chlorine is then injected into the water for disinfection. The water then flows through a series of settling and filtration basins where small amounts of polymer and sedimentation chemicals are added. After this process is complete, the water is filtered to remove the sediment. At this point the water is filtered through layers of fine charcoal and silicate sand. Small particles are removed and pure clean water is ready to be re-chlorinated as a safeguard and precaution against any microorganisms.

Voluntary testing (optional)

The Chicago Water Department monitors for contaminants, which are proposed to be regulated, or for which no standards currently exist but which could provide useful information in assessing the quality of the source water or the drinking water.

Cryptosporidium – Analyses have been conducted monthly on the source water since April 1993. Cryptosporidium has not been detected in these samples. Treatment processes have been optimized to ensure that if there are cryptosporidium cysts in the source water, they will be removed during the treatment process. By maintaining a low turbidity and thereby removing the particles from the water, the threat of cryptosporidium organisms getting into the drinking water system is greatly reduced.

Asbestos – Samples are examined for asbestos fibers in the source water and finished water on a routine basis. The EPA has determined that asbestos fibers greater than 10 microns in length could potentially cause lung cancer. We did not find fibers that are in this size category.

Taste and odor compounds – MIB and geosmin are monitored both in the source water and finished water. These analyses assist the personnel to determine the effectiveness of the treatment process as they strive to reduce these compounds and provide a drinking water without detectable tastes and odors.

The City of Chicago carefully monitors the chlorine, using just enough chlorine to protect its customers, without compromising taste. Lastly, fluoride is added to inhibit tooth decay. A corrosive inhibitor is added to protect the distribution system pipes.

The finished water is pumped into the City of Chicago supply system. The water there is pumped westerly by the city's Springfield Pumping Station through a 48"-36" supply line to the Village of Melrose Park's connection at Harlem and Wabansia.

Water is stored in the Village's 2 million gallon reservoir and again pumped by a booster station at 8300 North Avenue. The water travels through a 42" supply line to 2-4 million gallon reservoir at the 15th Avenue pumping station a 2 million gallon reservoir at the 23rd Avenue Main Pumping Station. At those points the water is pumped into the local water distribution lines. The Village of Melrose Park once again tests the water for chlorine levels, and adds the required chlorine to insure clean and safe water to its consumers.

Substance Expected in Drinking Water

Under The Safe Drinking Water Act, S.D.W.A., The U.S.A. Environmental Protection Agency is responsible for establishing national limits for hundreds of substances in drinking water. The Act also specifies various treatments that water systems must use to remove these substances.

The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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 Water Hotline (1-800-426-4791).

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 (1-800-426-4791).

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 Melrose Park** 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>.

If there were a problem with water contaminant, who would notify me?

If contaminant levels were to exceed the M.C.L. for safe use, the Village of Melrose Park Department of Public Works will notify you with newspaper, TV and radio announcements. Also, the Village's Emergency Services/Public Safety would patrol the streets of Melrose Park instructing you of what appropriate action you can use to protect your family's health. These actions might include boiling the water for a particular period of time.

Tabular Information

This report includes tables of contaminants found in drinking water. The tables do not list contaminants that were not found in the Chicago and Melrose Park water supply. Any contaminants detected in Melrose Park's water were under maximum contaminants levels (M.C.L.) within the safe drinking water guidelines set by U.S. EPA and are not expected to cause any health

risks. However, it is important for you to know exactly what was detected and how much of the substance was present in the water.

The Village of Melrose Park hopes this information helps make its water customers better informed on the water we use in our homes and businesses.

2015 Non-detected Contaminants

The following table includes contaminants monitored for, but not detected in the most recent sample. The CCR rule does not require that this information be reported; however, monitoring had indicated that these contaminants were not present in the water supply. In some cases, if a contaminant is not detected in a water supply, monitoring can be reduced to once every three or six years, however, the Village monitors every year.

Data Tabulated By Chicago Department of Water Management

2015 Water Quality Data

-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 water systems must follow.

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

Nd: Not detectable at testing limits. **N/a:** not applicable

Detected Contaminants

| Contaminant (unit of measurement) Typical Source of Contaminant | MCLG | MCL | Highest Level Found | Range of Detections | Violation | Date of Sample |
|--|-------------|------------|----------------------------|----------------------------|------------------|-----------------------|
| <u>TURBIDIY DATA</u> | | | | | | |
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|--|-----|----------------|--------|---------------|--|-----------|
| Turbidity (%<0.3 NTU) Soil runoff. Lowest monthly percent meeting limit. | N/a | TT(95%<0.3NTU) | 99.7% | 99.7%-100.0% | | |
| Turbidity (NTU) Soil runoff. Highest single measurement. | N/a | TT=1NTU max | 0.45 | N/a | | |
| <u>INORGANIC CONTAMINANTS</u> | | | | | | |
| Barium (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. | 2 | 2 | 0.0193 | 0.0193-0.0201 | | |
| | | | | | | |
| | | | | | | |
| Nitrate (As Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks,sewage; Erosion of natural deposits. | 10 | 10 | 0.30 | 0.28-0.30 | | |
| Total Nitrate & Nitrite (As Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. | 10 | 10 | 0.30 | 0.28-0.30 | | |
| | | | | | | |
| 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 | | | | | | |
| <u>UNREGULATED CONTAMINANTS</u> | | | | | | |
| Sulfate (ppm) Erosion of naturally occurring deposits | n/a | n/a | 27.2 | 18.8-27.2 | | |
| Sodium (ppm) Erosion of naturally occurring deposits; Used as water softener. | N/a | n/a | 8.48 | 8.04-8.48 | | |
| <u>STATE REGULATED CONTAMINANTS</u> | | | | | | |
| Fluoride (ppm) Water additive which promotes strong teeth. | 4 | 4 | 1.01 | 0.76-1.01 | | |
| <u>RADIOACTIVE CONTAMINANTS</u> | | | | | | |
| Combined Radium (226/228) (pCi/l) Decay of natural and man-made deposits | 0 | 5 | 0.84 | 0.50-0.84 | | 2/11/2014 |
| GROSS ALPHA excluding radon and uranium Decay of natural and man-made deposits | 0 | 15 | 6.6 | 6.1-6.6 | | 2/11/2014 |
| <u>UCMR3 Compliance Reporting</u> | | | | | | |
| In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA, 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 the UCMR3 contaminants that we have monitored included volatile organic chemicals, metals, perfluorinated compounds, hormones, 1, 4-dioxane and chlorate. The contaminants that were detected in this monitoring program are listed below. | | | | | | |
| CHROMIUM (ppb) Natrually-occurring element; used in making steel and other alloys | 100 | 100 | 0.3 | 0.3-0.3 | | |
| MOLYBDENUM (ppb) | N/A | N/A | 1.1 | 1.0-1.1 | | |

| | | | | | | |
|---|-----|-----|------|-----------|--|--|
| Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used from molybdenum trioxide | | | | | | |
| STRONTIUM (ppb) Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions | N/A | N/A | 120 | 110-120 | | |
| VANADIUM (ppb) Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate | N/A | N/A | 0.2 | 0.2-0.2 | | |
| CHROMIUM-6 or HEXAVALENT CHROMIUM (ppb) Naturally-occurring element; used in making steel and alloys | N/A | N/A | 0.19 | 0.18-0.19 | | |
| | | | | | | |
| | | | | | | |

Unit of Measurement

ppm - Parts per million, or milligrams per liter

ppb - Parts per billion, or micrograms per liter

NTU – Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

%<0.5 NTU – Percent samples less than 0.5 NTU

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

Water Quality Data Table Footnotes

Turbidity

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

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.

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/l to 1.2 mg/l.

Sodium

There is not a state or 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.

2015 VIOLATION SUMMARY TABLE FOR CHICAGO **No Violations for Year 2015**

| Contaminant or Program | Violation Type | Monitoring Period Start Date – End Date | Violation Explanation |
|--------------------------------|-----------------------|--|------------------------------|
| None | None | None | None |
| Health Effects (if Applicable) | None | None | None |
| Actions we took: | None | | |

WHAT'S IN MY WATER?

Each year, the Village analyzes hundreds of water samples for bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes, and synthetic organic contaminants. For your information, we have compiled a list in the table below showing what substances were detected in our drinking water.

VILLAGE OF MELROSE PARK

Lead & Copper (Lead and Copper samples were collected from 30 area homes. None were found to exceed the Action Level. The 90th percentile values are shown.)

Regulated Contaminants Detected in 2015 (collected in 2014 unless noted)

Lead and Copper

Date Sampled Aug. 26th, 2014

| Lead MCLG | Lead Action | Lead 90th Percentile | # Sites Over Lead AL | Units | Violation | Likely Source of Contaminant |
|-----------|-------------|----------------------|----------------------|-------|-----------|---|
| 0 ppb | 15 ppb | 5.28 ppb | 0 | ppb | N | Corrosion of household plumbing systems: Erosion of natural deposits |

| Copper MCLG | Copper Action | Copper 90th Percentile | # Sites Over Copper AL | Units | Violation | Likely Source of Contaminant |
|-------------|---------------|------------------------|------------------------|-------|-----------|---|
| ND | ND | ND | 0 | ppm | N | Corrosion of household plumbing systems: Erosion of natural deposits |

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below, which there is no known or expected risk to health. MCLG's allow for a margin of safety.

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.

Na: not applicable.

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

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

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

Coliform Bacteria

| Maximum Contaminant Level Goal | Total Coliform Maximum Contaminant Level | Highest No. of Positive | Fecal Coliform or E. Coli Max. Contaminant Level | Total No. of Positive E. Coli Or Fecal Coliform Samples | Violation | Likely Source of Contamination |
|--------------------------------|--|-------------------------|--|---|-----------|--------------------------------------|
| 0 | <5% of monthly samples are positive | 4 | | 0 | N | Naturally Present in the Environment |

Regulated Contaminants

| Disinfectants & Disinfection By-Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contaminants |
|--|-----------------|------------------------|--------------------------|-----------------------|--------|-------|-----------|---|
| Total Haloacetic Acids (HAA5) | 2015 | 13 | 7.9-17.85 | No goal for the total | 60 | ppb | No | By-product of drinking water chlorination |
| TTHMs (Total Trihalomethanes) | 2015 | 31 | 17.72-42.3 | No goal for the total | 80 | ppb | No | By-product of drinking water chlorination |
| Chlorine | 12/31/15 | 0.7 | 0.6-0.9 | MRDLG=4 | MRDL=4 | ppm | No | Water additive used to control microbes |

*MCL Statement: The maximum contaminant level (MCL) for TTHM and HAA5 is 80 ppm and 60 ppm respectively and is currently only applicable to surface water supplies that serve 10,000 or more people. These MCLs will become effective 01/01/2005 for all groundwater supplies and surface supplies serving less than 10,000 people. Until 01/01/2005, surface water supplies serving less than 10,000 people, any size water supply that purchase from a surface water source, and groundwater supplies serving more than 10,000 people must meet a state imposed TTHM MCL of 100 ppm. Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their livers, kidneys, or central nervous systems, and may have increased risk of getting cancer.

2015 UCMR3 Compliance Report

| Substance (units) | Year Sampled | Amount Detected (average) | Range of Detections (lowest- highest) | Typical Source |
|------------------------------------|--------------|---------------------------|---------------------------------------|--|
| Chlorodifluoromethane ² | 2015 | 0.51 UG/L | ND-0.51 UG/L | Chlorofluorocarbon; occurs as a gas, and used as a refrigerant, as a low-temperature solvent, and in fluorocarbon resins, especially tetrafluoroethylene polymers. |
| Chromium ² | 2015 | 1.125 UG/L | 0.4-2.7 UG/L | Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes, and pigments, leather tanning, and wood preservation |
| Chromium 6 (ppb) ² | 2015 | 0.1875 UG/L | 0.2-0.19 UG/L | Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes, and pigments, leather |
| Molybdenum ² | 2015 | 1.15 UG/L | 1.1-1.3 UG/L | Naturally-occurring element found in ores and present in plants, animals, and bacteria; commonly used form molybdenum trioxide used as a chemical reagent. |
| Strontium ² | 2015 | 118.375 UG/L | 110.9-128.7 UG/L | Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions. |
| Vanadium ² | 2015 | 0.3 UG/L | 0.2-0.4 UG/L | Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst. |
| | | | | |

2015 VIOLATION SUMMARY TABLE FOR MELROSE PARK

No Violations Were Found for Year **2015**.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water and sewer bills. Here are a few suggestions.

Conservation measures you can use inside your home include:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car, and save the hose for rinsing.