

**2015 CITY OF NORTHLAKE  
CONSUMER CONFIDENCE ANNUAL WATER QUALITY  
REPORT  
PWSID # 0314710**

**For the period of January 1, 2015 to December 31, 2015**

**Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien. ("This report contains very important information. Translate it, or speak with someone who understands it.")**

The City of Northlake has been providing clean water to our community since 1949, helping to keep you and your family healthy. We take this mission very seriously. As shown in this annual report covering the year 2015, the water we delivered surpassed the strict regulations of the State of Illinois and the U.S. Environmental Protection Agency (EPA). We are dedicated to providing the highest quality of drinking water to our customers in the most reliable and professional manner. Our goal is to achieve complete consumer confidence in our drinking water supply by maintaining a premier water system and open communication with our customers. This report complies with a new federal law that requires all municipalities to provide water quality information on health issues and regulations for drinking water. For more information about your drinking water, opportunities to get involved, or to receive a paper copy of this report please contact **Anthony Faciano** by calling **(708) 562-0940** or by writing to this address: 55 E. North Ave., Northlake, IL 60164. Also, you are welcome and encouraged to attend public meetings on the first and third Monday of each month at 7:00 p.m. at City Hall. Our web site is **[www.northlakecity.com](http://www.northlakecity.com)**

**OUR WATER BOARD MEMBERS**

**Mayor  
Jeffrey T. Sherwin**

**Alderman**

**Ward 1  
Paul Straube  
Penny Feldmann**

**Ward 2  
Jaime S. Contreras  
Thomas Padilla**

**Ward 3  
Rick Riesterer  
Mark Werba**

**Ward 4  
Rich Grochowski  
Francine Patti**

**SOURCE OF WATER**

Lake Michigan is the sole source of water used to provide drinking water for Chicago and 123 suburban communities. The Environmental Protection Agency (EPA) has found that the quality of Lake Michigan water has improved dramatically over the past 24 years. Lake Michigan, by volume, is the second largest Great Lake and the only one located totally within the United States. All 63 miles of shoreline within Illinois are now considered to be in good condition. It serves as a source of drinking water, as a place for swimming and fishing, and as a scenic wonderland.

**What you should know!**

- φ The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity.

## **SOURCE WATER ASSESSMENT**

A Source Water Assessment summary is included below for your convenience

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. 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 MWRDGC 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. Finally, one of the best ways to ensure a safe source of drinking water is to develop a program designed to protect the source water against potential contamination on the local level. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of the watershed protection activities in this document are aimed at this purpose. Citizens should be aware that everyday activities in an urban setting might have a negative impact on their source water. Efforts should be made to improve awareness of storm water drains and their direct link to the lake within the identified local source water area. A proven best management practice (BMP) for this purpose has been the identification and stenciling of storm water drains within a watershed. Stenciling along with an educational component is necessary to keep the lake a safe and reliable source of drinking water.

### **Contaminants that may be present in source water include:**

Substances that may be present in source water include: biological contaminants, such as viruses and bacteria; inorganic contaminants, such as salts and metals; pesticides and herbicides; organic chemicals from industrial or petroleum use; and natural or man-made radioactive materials.

- 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 storm water 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 storm water runoff and septic systems; and
- Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.

## **Educational Information:**

- φ Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, but their presence does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).
- φ In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain substances in water provided by public systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection of public health.
- φ 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 infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).
- φ Lead –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. We 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 your 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>
- φ **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 City of Northlake Department of Public Works will notify you, the newspaper, TV and radio announcements. Also, the City's Emergency Services/Public Safety would patrol the streets of City of Northlake 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.

## **DEFINITION OF TERMS:**

**Maximum Contaminant 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.

**90<sup>th</sup> Percentile:** 90% of samples are equal to or less than the number in the chart.

**NA:** Not applicable. **ND:** Not detectable at testing limits.

**PPB :** micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water

**PPM :** milligrams per liter or parts per million – or one ounce in 7,350 gallons of water

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

**Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

**Level Detected:** 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 Detected:** This column represents a range of individual sample results from lowest to highest that were collected during the CCR calendar year.

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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 disinfectants to control microbial contaminants.

**Maximum Residual Disinfectant Level (MRDL):** 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.

**Highest Level Detected:** This column represents the highest single sample reading of a contaminant of all the samples collected in 2009.

**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 this column, monitoring for this contaminant was conducted during the Consumer Confidence Report year.

## **CITY OF NORTHLAKE** **2015 Regulated Contaminants Detected**

### **Lead and Copper**

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contaminant
Lead	8 / 2014	0	15	6	1	ppb	N	Corrosion of household plumbing systems: Erosion of natural deposits.

### **Regulated Contaminants**

Disinfectants and Disinfections By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Haloacetic Acids (HAA5)*	2015	17	6.72 – 20.32	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling may occur in the future.

Total Trihalomethanes (TTHm)*	2015	36	22.53 – 40.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling may occur in the future.

### **Water Quality Data Table Footnotes**

#### **Turbidity**

Turbidity is a measure of the cloudiness of the water. We monitor it because it is 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.

**The City of Northlake parent supply is the City of Chicago, Melrose Park via Union Pacific Railroad**

The City of Chicago Water Department provides the water treatment necessary to safeguard the water delivered to Melrose Park via Union Pacific Railroad then to the City of Northlake. 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 series of settling and filtration basins where small amounts of polymer and sediments chemicals are added. After this process 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 appears and is ready to be re-chlorinated as a safeguard and precaution against any microorganisms.

**IL0314710 - City of Northlake 2015 Violation Summary Table**

This table is to assist you in the identification of the year 2014 violation(s) that are required in your CCR. The table does NOT include the required explanation of the noted violation(s) and you will need to provide this information as explained in the CCR Guidance Manual

<b>Violation Type</b>	<b>Violation Begin/End</b>	<b>Violation Explanation</b>
No Violations		

Health effects: None

**IL0311860 - Village of Melrose Park 2015 Violation Summary Table**

There were no violations in monitoring or sampling during the 2014 period for the Village of Melrose Park.

**IL0316000 – City of Chicago 2015 Violation Summary Table**

There were no violations in monitoring or sampling during the 2014 period for the City of Chicago.

## **Water Conservation Tips**

Water conservation measures are an important first step in protection 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 bill. Here are a few suggestions.

Conservation measures you can use inside your home include

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

Conservation measures you can use outdoor

1. Water the lawn and garden in the early morning or evening.
2. Use mulch around plants and shrubs.
3. Repair leaks in faucets and hoses.
4. Use water-saving nozzles.

Use water from a bucket to wash your car, and save the hose for rinsing.

# CITY OF CHICAGO (PWSID# IL0316000)

Data Tabulated by Chicago Department of Water Management

## 2015 Water Quality Data

### Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected Lowest Monthly%	Range of Detections	Violation	Date of Sample
<b><u>Turbidity Data</u></b>						
<b>Turbidity (NTU/Lowest Monthly %&lt;0.3 NTU)</b> Soil Runoff	N/A	TT(95%<0.3NTU)	99%	99.7%-100.0%		
<b>TURBIDITY (NTU/Highest Single Measurement)</b> Soil Runoff	N/A	TT(1NTUmax)	0.45	N/A		

### Inorganic Contaminants

<b>BARIUM (ppm)</b> Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0201	0.0193-0.0201		
<b>NITRATE (As NITROGEN) (ppm)</b> Runoff from fertilizer use; Leaching from septic tanks, sewerage; Erosion of natural deposits	10	10	0.3	0.28-0.30		
<b>TOTAL NITRATE &amp; NITRITE (AS NITROGEN) (ppm)</b> Runoff from fertilizer use; Leaching from septic tanks, sewerage; Erosion of natural deposits	10	10	0.3	0.28-0.30		

### Total Organic Carbon - 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>MCLG</u>	<u>MCL</u>	<u>Highest Level</u>	<u>Range of Detection</u>	<u>Violation</u>	<u>Date of Sample</u>
<b><u>Unregulated Contaminants</u></b>						
<b>SULFATE (ppm)</b> Erosion of naturally occurring deposits	N/A	N/A	27.2	18.8 - 27.2		
<b>SODIUM (ppm)</b> Erosion of naturally occurring deposits; Used as water softener	N/A	N/A	8.48	8.04 - 8.48		

### **State Regulated Contaminants**

<b>FLUORIDE (ppm)</b>	4	4	1.01	0.76 - 1.01
Water additive which promotes strong teeth				

### **Radioactive Contaminants**

<b>COMBINED RADIUM 226/228 (pCi/L)</b>	0	5	0.84	0.50 - 0.84
Decay of natural and man-made deposits.				
<b>GROSS ALPHA excluding radon and uranium (pCi/L)</b>	0	15	6.6	6.1 - 6.6
Decay of natural and man-made deposits.				

### **UCMR3 Compliance Reporting**

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 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.

<b>CHROMIUM (ppb)</b>	100	100	0.3	0.3 - 0.3
Naturally-occurring element; used in making steel and other alloys				
<b>MOLYBDENUM (ppb)</b>	NA	NA	1.1	1.0-1.1
Naturally-occurring element found in ores and present in plants animals and bacteria; commonly used form molybdenum trioxide				
<b>STRONTIUM (ppb)</b>	NA	NA	120	110-120
Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions				
<b>VANADIUM (ppb)</b>	NA	NA	0.2	0.2 - 0.2
Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate				
<b>CHROMIUM-6 or HEXAVALENT CHROMIUM (ppb)</b>	NA	NA	0.19	0.18 - 0.19
Naturally-occurring element; used in making steel and alloys				

### **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

%<0.3 NTU - Percent of samples less than or equal to 0.3 NTU

pCi/L - Picocuries per liter, used to measure radioactivity