



2016

Consumer Confidence Report



The Source of City of Elmhurst Drinking Water

Once again the City of Elmhurst proudly presents its annual water quality report. This edition covers water tests completed from January 1 through December 31, 2015. The City is pleased to tell you that its compliance with all state and federal drinking water laws remains exemplary. There were no water quality violations recorded during 2015. As in the past, the City is committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education, while continuing to serve the needs of all of our water customers.

This publication conforms to the federal regulation under the Safe Drinking Water Act requiring water utilities to provide detailed water quality information to each customer annually.

In this era of increased security concerns, please rest assured that the City of Elmhurst has taken every precaution possible and will continue to remain vigilant to ensure the highest protection of the purity of the water supplied to our customers.

For more information about this report, or for any questions relating to your drinking water, please call Dan Rosenwinkel, Superintendent of Water and Wastewater – Production & Treatment, at (630) 530-3099. This report is also posted on the City of Elmhurst web site:

<http://elmhurst.org/DocumentCenter/Home/View/649>

OR

www.elmhurst.org and select “City Services” drop down, then: under “Public Works” select “Water/Wastewater Production & Treatment” then “Water Production & Distribution”, and Water Quality Report.



The City of Elmhurst’s Public Water Supply (PWS) customers are fortunate because Elmhurst enjoys an abundant water supply from Lake Michigan. The City of Elmhurst purchases water from the DuPage Water Commission (DWC) located here in Elmhurst. The DWC purchases water from the City of Chicago. Lake Michigan offers an abundant source of exceptionally high quality water. The City of Chicago operates one of the most modern surface water treatment facilities in the United States and is capable of meeting or exceeding all state and federally mandated requirements for water quality.

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

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 EPA’s Safe Drinking Water Hotline at (800) 426-4791. Web sites with water quality data available are:

EPA: <http://epadata.epa.state.il.us/water/>

DuPage Water Commission: <http://www.dpwc.org/>

City of Chicago Water Department: <http://www.cityofchicago.org/city/en/depts/water.html>

CCR: [http://www.cityofchicago.org/city/en/depts/water/supp_info/](http://www.cityofchicago.org/city/en/depts/water/supp_info/consumer_confidancereports.html)

[consumer_confidancereports.html](http://www.cityofchicago.org/city/en/depts/water/supp_info/consumer_confidancereports.html)

Did You Know?

Your Elmhurst Public Water Supply:

- ⇒ was commissioned in 1919.
- ⇒ has been using water from Lake Michigan since 1991.
- ⇒ has 15 million gallons of storage capacity.
- ⇒ has a daily allocation of 4.693 million gallons of water per day from Lake Michigan.
- ⇒ has ability to use 7.9 million gallons of water per day from Lake Michigan.
- ⇒ had a daily average use of 4.66 million gallons of water per day in August 2015.
- ⇒ is comprised of 170.08 miles of water main.
- ⇒ has 2,214 fire hydrants on the system.
- ⇒ has booster pumps capable of pumping > 20 million gallons of water per day.

Community Participation

The City of Elmhurst’s City Council meets the first and third Monday of each month. Public comments or statements regarding the public water supply are welcome. Meetings are called to order at 7:30 p.m. and are held at Elmhurst City Hall, 209 N. York Street. **This report is intended to provide you with important information about your drinking water and the efforts made by the City of Elmhurst to provide safe drinking water.**

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

Source Water Assessment



We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or contact our water operator at (630) 530-3099. To view a summary version of the completed Source Water Assessment, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at

<http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Source of Water: Chicago

The Illinois EPA considers all surface water sources of a 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 questions or information regarding this report please

contact Dan Rosenwinkel at 630-530-3099

or visit the Water/Wastewater Division at

<http://www.elmhurst.org>

The City of Elmhurst Annual Consumer Confidence Report is going **Digital!**

A PDF version of the current report is available online at:

<http://elmhurst.org/DocumentCenter/Home/View/649>

Tap Vs. Bottled

Thanks in part to aggressive marketing; the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the National Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25% of bottled water is actually bottled tap water (40% according to government estimates). The Food and Drug Administration is responsible for regulating bottled water, but those rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled water makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for 70% of all bottled water sold in the United States.

Furthermore, Americans purchase more bottled water than any other nation in the world; approximately 30 billion bottles each year, with only about 29% or 6 billion bottles recycled. In order to make these bottles, manufacturers use 17 million barrels of crude oil – enough to fuel more than one million cars for a year. Imagine a water bottle filled a quarter of the way up with oil that is about how much oil was needed to produce that bottle. In addition to the amount of oil, more than 2.5 million tons of carbon dioxide is produced to manufacture these 30 billion bottles each year. If you buy bottled water, recycle the bottle. But the better solution – for you and the environment – is to drink tap water. For detailed discussion on the NRDC study results, check out their web site at www.nrdc.org/water/drinking/bw/exesum.asp.



Frequently Asked Questions

What is the hardness of Elmhurst water?

Hardness is about 144 mg/L as CaCO₃ or about 8 gr/gal.

Why is my water sometimes cloudy or 'milky' looking?

Water, especially cold water, can dissolve a significant amount of air. As water warms up that dissolved gas will be released in the form of tiny, almost microscopic, bubbles. Those bubbles will make the water look cloudy. To test this, fill a clear glass container with water. Place the glass on the table and watch. Slowly the cloudiness will rise to the top as the bubbles float and disperse.



Sources of Contaminants

WATER CONSERVATION

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.



- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.

- Water plants only when necessary.

- Consider investing in a rain barrel to use for watering your lawn/garden.

- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak,

place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.

- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce your next water bill!

* Visit www.epa.gov/watersense for more information.

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 can 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 can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA 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.

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. EPA/Centers for Disease Control (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 (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. DuPage Water Commission is responsible for providing high quality drinking water, but can not 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 the 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>.

2015 WATER QUALITY DATA

The City of Chicago Department of Water Management, the DuPage Water Commission and the City of Elmhurst Division of Water/Wastewater P&T routinely monitor for contaminants in your drinking water according to Federal and State Laws. The City of Elmhurst Division of Water/Wastewater P&T collects more than fifty bacteriological samples per month. The attached table shows the results for the City of Elmhurst Water distribution system IL0430350 for the monitoring period of January 1, 2015 to December 31, 2015.

Regulated Contaminants

Coliform Bacteria						
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform of E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	0 Positive Monthly Sample	0		0	No	Naturally present in the environment

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# of Sites over AL	Units	Violation	Likely Source of Contamination
Copper	2014	1.3	1.3	0.123	0	ppm	No	Erosion of Natural Deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

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 should occur in the future.

Disinfectants/ Disinfection Byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	7/31/15	0.9	0.6-0.9	MRDLG= 4	MRDL= 4	ppm	No	Water additives used to control microbes.
Haloacetic Acids(HAA5)	2015	13.8	4.2-13.8	NA	60	ppb	No	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM)	2015	20.9	18.6-20.9	NA	80	ppb	No	By-product of drinking water chlorination.

Violations Table

Consumer Confidence Rule			
Violation Type	Violation Begin	Violation End	Violation Explanation
The Consumer Confidence Rule required community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
NONE			

0316000 CHICAGO DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT 2015 Water Quality Data

Contaminant (unit of measurement) - Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detection	Violation	Date of Sample
Turbidity Data (Lowest Monthly%)						
TURBIDITY (NTU/Lowest monthly % ≤0.3 NTU) - Soil Runoff	NA	TT (95%≤0.3NTU)	99.7%	99.7% - 100%		
TURBIDITY (NTU/Highest Single Measurement) - Soil Runoff	NA	TT(1 NTU max)	0.45	NA		
Inorganic Contaminants						
BARIUM (ppm) - Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0201	0.0193—0.0201		
ARSENIC (ppb) - Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	0	10	0.77	0.519 - 0.767		
SELENIUM (ppb) - Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines	50	50	2.48	ND - 2.48		
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		
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.						
Unregulated Contaminants						
SULFATE (ppm) - Erosion of naturally occurring deposits.	NA	NA	27.2	18.8—27.2		
SODIUM (ppm) - Erosion of naturally occurring deposits; Used as a water softener	NA	NA	8.48	8.04—8.48		
State Regulated Contaminants						
FLUORIDE (ppm) - Water additive which promotes strong teeth	4	4	1.01	0.76—1.01		
Radioactive Contaminants						
COMBINED RADIUM 226/228 (pCi/L) - Decay of natural and man-made deposits	0	5	0.84	0.50—0.84		2/11/14
GROSS ALPHA excluding radon and uranium (pCi/L) - Decay of natural and man-made deposits	0	15	6.6	6.1—6.6		2/11/14

UCMR3 Compliance Reporting

In compliance with the Unregulated Contaminants 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 include volatile organic chemicals, metals, prefluorinated compounds, hormones, 1,4-dioxane and chlorate. The contaminants that were detected in the monitoring program are listed below.

<i>Contaminant (unit of measurement) Typical source of contaminant</i>	<i>MCLG</i>	<i>MCL</i>	<i>Highest Level Detected</i>	<i>Minimum Detection Limit</i>
CHROMIUM (ppb) Naturally-occurring element; used in making steel and other alloys	100	100	5.6	0.2
MOLYBDENUM (ppb) Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide	NA	NA	1.1	1.0
STRONTIUM (ppb) Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions	NA	NA	132.1	3.0
VANADIUM (ppb) Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate	NA	NA	0.3	0.02
CHROMIUM-6 or HEXAVALENT CHROMIUM (ppb) Naturally-occurring element; used in making steel and alloys	NA	NA	0.22	0.03
4-ANDROSTENE-3, 17-DIONE (ppb) Steroidal hormone naturally produced in the human body; and used as an anabolic steroid and a dietary supplement	NA	NA	ND	0.0003
TESTOSTERONE (ppb) Androgenic steroid naturally produced in the human body; and used in pharmaceuticals	NA	NA	ND	0.0001

Definitions & Water Quality Table Footnotes

Definitions

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

%≤0.3 NTU: Percent of samples less than or equal to 0.3 NTU.

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

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

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.

Highest Level Detected: This column represents the highest single reading of a contaminant of all the samples collected in 2015.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs 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. MCLGs allow for a margin of safety.

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

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 of disinfectants to control microbial contaminants.

na: not applicable.

nd: Not detectable at testing limits.

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

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

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.

Minimum Detection Limit: This column represents a MDL of individual sample results that were collected during the CCR calendar year.

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

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 had recommended an optimal fluoride range of 0.9 mg/l to 1.2 mg/l until November 2015. As of November 2015, the new recommendation is an optimal fluoride level of 0.7 mg/l.

Sodium: There is not a state of 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.