

La Grange Highlands Sanitary District

2019 Water Quality Report

This year, as in years past, your tap water met all United States Environmental Protection Agency (USEPA) and state drinking water health standards. Our system vigilantly safeguards its water supply, and we are able to report that the La Grange Highlands Sanitary District had no violation of a contaminant level or of any other water quality standard in the previous year. This report summarizes the quality of water that we provided last year, from January 1, 2019 to December 31, 2019, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with this information because informed customers are our best allies.

The La Grange Highland Sanitary District purchases City of Chicago water from the City of Countryside via a meter vault on Joliet Road. Lake Michigan water is treated by the City of Chicago Department of Water Management (CDWM) and pumped to the Village of McCook prior to being received by the City of Countryside and ultimately the La Grange Highlands Sanitary District. Connections to adjacent water systems are available at four locations for use during emergency repair situations.

The La Grange Highlands Sanitary District tests and monitors the water supply to maintain the optimal levels of chlorine in their system. Bi-monthly samples are required for bacteriological testing (Total Coliform). On a yearly basis, samples are collected for Total Trihalomethane (TTHm) and Haloacetic Acids (HAA5) analyses. Lead and copper are monitored on a multi-year schedule.

We want our valued customers to be informed about their water quality. Please contact Mr. Jason Shepler, Superintendent, at (708) 246-5657 if you have any questions or concerns regarding the information presented in this Consumer Confidence Report (CCR). Copies of this CCR will not be mailed to each water customer; however copies of the report are available at the La Grange Highlands Sanitary District office. If you would like to learn more, you are welcome to attend any of our regularly scheduled meetings on the third Tuesday of each month at 5:00 P.M. at the La Grange Highlands Sanitary District office at 5900 South Willow Springs Road.

Water Source

The CDWM utilizes Lake Michigan as its source water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City and suburbs, while the Sawyer (formerly South) Water Purification Plant serves the southern areas of the City and suburbs. Lake Michigan is the only Great Lake that is entirely contained within the United States. It borders Illinois, Indiana, Michigan, and Wisconsin, and is the second largest Great Lake by volume with 1,180 cubic miles of water and third largest by area.

Susceptibility to Contamination

The Illinois EPA considers all surface water sources of a community water supply, such as Lake Michigan, 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 of all surface water supplies in Illinois. CDWM's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor of 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.

Where Do Contaminants Come From?

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, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

- 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, the United States Environmental Protection Agency (USEPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The FDA regulates 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 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 (1-800-426-4791).

Some people may be more vulnerable to contaminants in tap or bottled 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 for infections. These people should seek advice about drinking water from their healthcare providers. The 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 CDWM is responsible for providing high quality drinking water to the La Grange Highlands Sanitary District, 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 your 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 USEPA Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source Water Assessment Summary

The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with the watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination. The Illinois EPA has completed the SWAP for the CDWM's supply. More information on the water supply's SWAP is available by calling the CDWM at (312-744-6635).

To view a summary version of the completed Source Water Assessments including: Importance of Source Water; Susceptibility to Contaminant Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at the following address below:

<http://dataservices.epa.illinois.gov/swap/factsheet.aspx>.

2019 Voluntary Monitoring

The CDWM has continued monitoring for Cryptosporadium, Giardia and E. coli in its source water as part of its water quality program. To date, Cryptosporadium has not been detected in these samples, but Giardia was detected in 2010 in one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporadium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporadium and Giardia organisms into the drinking water system is greatly reduced.

In 2019, CDWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources. Please address any questions or concerns to CDWM's Water Quality Division at 312-742-7499. Data reports on the monitoring program for chromium-6 are posted on the City's website which can be accessed at the following address below:

https://www.chicago.gov/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html

2019 Water Quality Data

Detected Contaminants						
Contaminant (Unit of Measurement) <i>Typical Source of Contaminant</i>	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
Turbidity Data						
Turbidity (NTU/Lowest Monthly % \leq 0.3 NTU) <i>Soil Runoff</i>	N/A	TT (Limit: 95% \leq 0.3 NTU)	Lowest Monthly %: 100%	100% - 100%	No	
Turbidity (NTU/Highest Single Measurement) <i>Soil Runoff</i>	N/A	TT (Limit 1 NTU)	0.14	N/A	No	
Inorganic Contaminants						
Barium (ppm) <i>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits</i>	2	2	0.0208	0.0195 - 0.0208	No	
Nitrate (as Nitrogen) (ppm) <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>	10	10	0.35	0.33 - 0.35	No	

Total Nitrate & Nitrite (as Nitrogen) (ppm) <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>	10	10	0.35	0.33 - 0.35	No	
Total Organic Carbon (TOC)						
TOC	The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by IEPA.					
Unregulated Contaminants						
Sulfate (ppm) <i>Erosion of naturally occurring deposits</i>	N/A	N/A	26.7	25.8 - 26.7	No	
Sodium (ppm) <i>Erosion of naturally occurring deposits; Used as water softener</i>	N/A	N/A	10.2	8.73 - 10.2	No	
State Regulated Contaminants						
Fluoride (ppm) <i>Water additive which promotes strong teeth</i>	4	4	0.79	0.62 - 0.79	No	
Radioactive Contaminants						
Combined Radium (226/228) (pCi/L) <i>Decay of natural and man-made deposits</i>	0	5	0.84	0.50 - 0.84	No	2/11/2014
Gross Alpha excluding radon and uranium (pCi/L) <i>Decay of natural and man-made deposits</i>	0	15	6.6	6.1 - 6.6	No	2/11/2014

Definitions

Maximum Contaminant Level Goal (MCLG) – The level of 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.

Highest Level Detected – This column represents the highest single sample reading of a contaminant of all the samples collected in 2019.

Range of Detection – 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 CCR calendar year.

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

N/A – Not applicable

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

Why are certain contaminants monitored?

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

Unregulated Contaminants – A maximum contaminant level (MCL) for this contaminant has been established by either state or federal regulations, nor has mandatory health effects language. The purpose of 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 Health recommends an optimal fluoride level of 0.7 mg/L with a range of 0.6 mg/L to 0.8 mg/L.

Sodium – There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who have concerns about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.