

## **La Grange Highlands Sanitary District**

### **2020 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, 2020 to December 31, 2020, 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 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 for infections. These people should seek advice about drinking water from their healthcare 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 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 (312-742-2406).

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>.

### The Fourth Unregulated Contaminant Monitoring Rule (UCMR 4)

In compliance with UCMR 4, samples were collected at CDWM's entry points to the distribution system (EPTDS), also known as finished water, and analyzed for all contaminant groups except for Haloacetic Acids (HAAs), which were sampled from the distribution system. All the contaminant groups tested in finished water were below the minimum reporting levels specified in the test method under UCMR 4. Samples for HAA indicators (Total Organic Carbon and Bromide) were collected at two source water influent points for the system. For Bromide, test results ranged from 28.2 to 35.3 ppb, and for TOC, test results ranged from 1.79 to 1.80 ppm.

### Illinois EPA's Sampling of PER- and Polyfluoroalkyl Substances (PFAS)

The Illinois EPA collected finished water samples from CDWM's Water System on 10/29/2020 and analyzed the samples for a total of 18 PFAS contaminants. In its notification to Chicago, the Illinois EPA stated that these contaminants were not present in Chicago's drinking water at concentrations greater than or equal to the minimum reporting levels.

### 2020 Voluntary Monitoring

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

In 2020, 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. Chromium-6 data are posted at:

[:https://www.chicago.gov/city/en/depts/water/supp\\_info/water\\_quality\\_resultsandreports/city\\_of\\_chicago\\_emergincontaminantstudy.html](https://www.chicago.gov/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html)

For more information, please contact Andrea Chang, Acting Commissioner at 312-744-8190.

### 2020 Water Quality Data

| Detected Contaminants  |      |                          |                        |                     |           |                |
|--|------|--------------------------|------------------------|---------------------|-----------|----------------|
| Contaminant<br>(Unit of Measurement)<br><i>Typical Source of Contaminant</i> | MCLG | MCL                      | Highest Level Detected | Range of Detections | Violation | Date of Sample |
| <b>Turbidity Data</b>  |      |                          |                        |                     |           |                |
| Turbidity (NTU/Lowest Monthly % ≤ 0.3 NTU)<br><i>Soil Runoff</i>             | N/A  | TT (Limit: 95% ≤0.3 NTU) | Lowest Monthly %: 100% | 100% - 100%         | No        |                |

|   |  |                  |        |                 |    |  |
|---|--|------------------|--------|-----------------|----|--|
| Turbidity (NTU/Highest Single Measurement)<br><i>Soil Runoff</i>  | N/A  | TT (Limit 1 NTU) | 0.16   | N/A             | No |  |
| <b>Inorganic Contaminants</b>   |  |                  |        |                 |    |  |
| Barium (ppm)<br><i>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits</i>                                 | 2  | 2                | 0.0201 | 0.0198 - 0.0201 | No |  |
| Nitrate (as Nitrogen) (ppm)<br><i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>                 | 10   | 10               | 0.42   | 0.35 - 0.42     | No |  |
| Total Nitrate & Nitrite (as Nitrogen) (ppm)<br><i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i> | 10   | 10               | 0.42   | 0.35 - 0.42     | No |  |
| <b>Total Organic Carbon (TOC)</b>   |  |                  |        |                 |    |  |
| TOC   | The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by IEPA. |                  |        |                 |    |  |
| <b>Unregulated Contaminants</b>   |  |                  |        |                 |    |  |
| Sulfate (ppm)<br><i>Erosion of naturally occurring deposits</i>   | N/A  | N/A              | 27.8   | 27.5 - 27.8     | No |  |
| Sodium (ppm)<br><i>Erosion of naturally occurring deposits; Used as water softener</i>  | N/A  | N/A              | 9.55   | 8.73 - 9.55     | No |  |
| <b>State Regulated Contaminants</b>   |  |                  |        |                 |    |  |
| Fluoride (ppm)<br><i>Water additive which promotes strong teeth</i>   | 4  | 4                | 0.75   | 0.65 - 0.75     | No |  |
| <b>Radioactive Contaminants</b>   |  |                  |        |                 |    |  |

|  |                       |        |      |             |    |            |
|--|-----------------------|--------|------|-------------|----|------------|
| Combined Radium (226/228) (pCi/L)<br><i>Decay of natural and man-made deposits</i>               | 0                     | 5      | 0.95 | 0.83 - 0.95 | No | 2/4/2020   |
| Gross Alpha excluding radon and uranium (pCi/L)<br><i>Decay of natural and man-made deposits</i> | 0                     | 15     | 3.1  | 2.8 - 3.1   | No | 2/4/2020   |
| <b>Disinfectants and Disinfection By-Products</b>  |                       |        |      |             |    |            |
| Chlorine (ppm)<br><i>Water additive used to control microbes</i>                                 | MRDLG =4              | MRDL=4 | 0.8  | 0.8 – 0.8   | No | 12/31/2020 |
| Haloacetic Acids or HAA5 (ppb)<br><i>By-product of drinking water disinfection</i>               | No goal for the total | 60     | 33   | 32.4 - 33   | No | 2020       |
| Total Trihalomethanes or TTHM (ppb)<br><i>By-product of drinking water disinfection</i>          | No goal for the total | 80     | 53   | 51.8 – 53.3 | No | 2020       |

| <b>Other Regulated Contaminants</b>                                       |      |                            |                         |                               |   |           |                |
|---|------|----------------------------|-------------------------|-------------------------------|---|-----------|----------------|
| Contaminant (Unit of Measurement)<br><i>Typical Source of Contaminant</i> | MCLG | Total Coliform MCL         | Highest No. of Positive | Fecal Coliform or E. coli MCL | Total No. of Positive E. coli or fecal coliform samples | Violation | Date of Sample |
| <b>Coliform Bacteria</b>  |      |                            |                         |                               |   |           |                |
| Coliform Bacteria<br><i>Naturally present in the environment</i>          | 0    | 1 positive monthly example | 1                       |                               | 0   | No        |                |

| <b>Other Regulated Contaminants</b>                                       |      |     |                             |                      |           |                |  |
|---|------|-----|-----------------------------|----------------------|-----------|----------------|--|
| Contaminant (Unit of Measurement)<br><i>Typical Source of Contaminant</i> | MCLG | AL  | 90 <sup>th</sup> Percentile | No. of Sites Over AL | Violation | Date of Sample |  |
| <b>Lead and Copper</b>  |      |     |                             |                      |           |                |  |
| Copper (ppm)<br><i>Erosion of natural deposits; leaching from wood</i>    | 1.3  | 1.3 | 0.081                       | 0                    | No        | 2020           |  |

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| preservatives; corrosion of household plumbing systems |  |  |  |  |  |  |
|--|--|--|--|--|--|--|

## Definitions

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

**Action Level Goal (ALG)** – The level of contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for 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 CCR calendar year.

**Highest Level Detected** – This column represents the highest single sample reading of a contaminant of all the samples collected in 2020.

**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.

**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 Residual Disinfectant Level (MRDL)** – The highest level of a 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 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.

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

**N/A** – Not applicable

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

**ppb:** Parts per billion, or micrograms per liter

**ppm:** Parts per million, or milligrams per liter

**Range of Detection** – This column represents a range of individual sample results, from lowest to highest 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.

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

## 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 not 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.