

# ANNUAL WATER QUALITY REPORT

Reporting Year 2022

*Presented By*





## Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.

## Source Water Assessment

We want our valued customers to be informed about their water quality. 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 Village Hall or call our water operator at (708) 481-8950. To view a summary version of the completed source water assessments, including Importance of Source Water, Susceptibility to Contamination Determination, and Documentation/Recommendation of Source Water Protection Efforts, visit [www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl](http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl).

### Radon

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your state radon program or the U.S. EPA Radon Hotline at (800) SOS-RADON.

## Water Treatment Process

Chlorine is added as a precaution against any bacteria that may be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Fluoride (to prevent tooth decay) and a corrosion inhibitor (to protect distribution system pipes) are added before the water is pumped to sanitized water towers and into your home or business.

## Where Does My Water Come From?

The water production system currently pulls from groundwater and utilizes ion exchange and aeration treatment facilities. Our total maximum daily pumping capacity is 3,400 gallons per minute (4.9 million gallons per day); we have 1 million gallons of storage. In 2010 we delivered a total of 390,693,000 gallons for a daily average of 1.07 million gallons per day. In 2022 we delivered 364,345,000 gallons, which is an average of 1,063,000 gallons per day.

The village water system consists of three wells, each with its own treatment and elevated tank for water storage. Our water treatment plants are located in Richton Hills subdivision, with a capacity of 250,000 gallons of storage; in Lakewood subdivision, with a capacity of 250,000 gallons of storage; and in the Lincoln Crossings subdivision, which has a capacity of 500,000 gallons of storage.

The water distribution system consists of approximately 42 miles of pipe ranging from 6 to 16 inches in diameter. There are 650 fire hydrants, 600 water main line valves, and approximately 3,500 water meters ranging in size from 0.75 to 3 inches in diameter.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact Matt Riechers at (708) 481-8950.



## Testing for *Cryptosporidium*

*Cryptosporidium* is a microbial parasite found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100-percent removal. Monitoring of source water and finished water indicates the presence of these organisms. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks; however, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

## Lead in Home Plumbing

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 are responsible for providing high-quality drinking water, but 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 two 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 at (800) 426-4791 or [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



## Monitoring and Reporting Violation

The Village of Richton Park contracts out its required testing. The laboratory was supposed to submit the test results to the state. This did not occur, and the village incurred violations. Results of the analysis have now been received and properly recorded as required by state and federal law. We have already taken the steps to ensure that reporting will be performed in the future so that this oversight will not be repeated.

The tests that were not reported to the Illinois EPA correctly were for antimony, arsenic, barium, beryllium, cadmium, chromium, manganese, lead, copper, mercury, selenium, thallium, zinc, and the public notification rule.

## What Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. 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 some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 dissolves naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

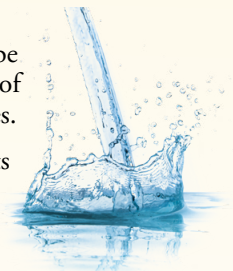
Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



## PFAS Statewide Investigation

In 2022 we participated in the Illinois statewide investigation for per- and polyfluoroalkyl substances (PFAS). We tested for 18 PFAS, and none were detected in our finished drinking water. For more information about PFAS health advisories, visit <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx>.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set by Illinois EPA.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2022	10	0	2.42	2.17–2.42	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2022	2	2	0.00599	0.00599–0.00599	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	2022	[4]	[4]	0.8	0.6–0.8	No	Water additive used to control microbes
Chromium (ppb)	2022	100	100	16.6	15–16.6	No	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (pCi/L)	2020	5	0	0.659	0.659–0.659	No	Erosion of natural deposits
Fluoride (ppm)	2022	4	4	0.62	0.55–0.62	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 1 (ppb)	2022	60	NA	3	0.49–2.63	No	By-product of drinking water disinfection
Iron (ppb)	2019	1,000 <sup>1</sup>	NA	170	170–170	No	Erosion from naturally occurring deposits
Manganese (ppb)	2019	150 <sup>2</sup>	NA	1.5	1.5–1.5	No	Erosion of naturally occurring deposits
Nitrate (ppm)	2019	10	10	0.04	ND–0.04	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	2022	50	50	3.86	3.41–3.86	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	2022	NA <sup>3</sup>	NA	230	202–230	No	Erosion of naturally occurring deposits; used in water softener regeneration
TTHMs [total trihalomethanes]–Stage 1 (ppb)	2022	80	NA	16	10.21–15.51	No	By-product of drinking water disinfection
Zinc (ppb)	2018	5,000 <sup>4</sup>	NA	0.015	0.015–0.015	No	Naturally occurring; discharge from metal factories

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

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

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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 detected):** Indicates that the substance was not found by laboratory analysis.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**SMCL (Secondary Maximum Contaminant Level):** These standards are developed to protect aesthetic qualities of drinking water and are not health based.

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.212	0/120	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2022	15	0	7.67	0/120	No	Corrosion of household plumbing systems; erosion of natural deposits



## BY THE NUMBERS

The number of Olympic-sized swimming pools it would take to fill up all of Earth's water.

**800**  
TRILLION

**1** The average cost in cents for about 5 gallons of water supplied to a home in the U.S.

The percent of Earth's water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers.

**99**

**50** The average daily number of gallons of total home water use for each person in the U.S.

The percent of Earth's surface that is covered by water.

**71**

**330**  
MILLION The amount of water on Earth in cubic miles.

The percent of the human brain that contains water.

**75**

<sup>1</sup> Iron is not currently regulated by the U.S. EPA. However, the state has set an MCL for supplies serving a population of 1,000 or more.

<sup>2</sup> Manganese is not currently regulated by the U.S. EPA. However, the state has set an MCL for supplies serving a population of 1,000 or more.

<sup>3</sup> Sodium is not currently regulated by the U.S. EPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1,000 or more.

<sup>4</sup> Zinc is not currently regulated by the U.S. EPA. However, the state has set an MCL for supplies serving a population of 1,000 or more.

