VILLAGE OF LYONS

ILLINOIS

2021 Consumer Confidence Report
Public Water Supply Facility ID: IL0311710
Christopher Getty, Mayor

June, 2022

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

Dear Lyons Water Customer,

The Village of Lyons, in compliance with the Safe Drinking Water Act (SDWA), and in conjunction with the Village of McCook and the City of Chicago, is issuing the Consumer Confidence Report (CCR) for the monitoring period of January 1, 2021 through December 31, 2021. Contained within this report, is important information concerning the quality and source of your drinking water. During 2021, the Village of Lyons continued to provide water that meets and exceeds the requirements of the United States Environmental Protection Agency (USEPA) and the Illinois EPA drinking water standards.

If you would like to learn more, please contact Village Hall or visit our web site at http://www.villageoflyons-il.net/. There you will find the completed Illinois EPA Source Water Assessments and information regarding current Village Water Infrastructure projects. To view a summary version of the completed Source Water Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA at: http://dataservices.epa.illinois.gov/swap/factsheet.aspx.

Additional Information

If there are any questions, concerns, or if additional information is needed, please contact Tito Rodriguez, Acting Public Works Director, at (708) 442-4500. Also, you can participate in one of our regularly scheduled meetings, located in the Council Chambers, at the Village Hall, on 4200 Lawndale Ave, Lyons, Illinois. The Village Board meets on the first and third Tuesday of every month at 7:00 PM. Additional information can also be found by contacting the USEPA's Safe Drinking Water Hotline at (1-800-426-4791). Copies of this report will be available at the Village Hall.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. Copies of this report will be

Lawn Care Recommendations

The Village of Lyons recommends to water deeply and infrequently. One inch of water per week is ideal and over-watering wastes your money. Over-watering removes plant nutrients from the soil and can cause disease problems in your lawn.

The Village of Lyons follows the water conservation recommendations of the IEPA on sprinkling restrictions. The Village restricts sprinkling during the hours between Noon to 6:00 PM. during the period of May 15 to September 15.

CONSUMER INFORMATION

The Village of Lyons tests the water supply for chlorine content daily to maintain optimum levels for the consumers' needs. On a monthly basis, bacteriological samples are taken. On a yearly basis, samples are submitted for Total Trihalomethane (TTHM) Analysis. Samples are also provided for lead and copper monitoring on a schedule established by the IEPA. All testing and reports are performed according to the requirements of IEPA.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Federal Drug Administration (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. The EPA and the Center of Disease Control and Prevention (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.

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; lead is not found in the source water. We cannot control the variety of materials used in plumbing components. Lead can enter drinking water when service pipes that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. The most common problem is with brass or chrome-plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter the water. Homes built before 1986 are more likely to have lead pipes, fixtures, and solder. The Safe Drinking Water Act (SDWA) has reduced the maximum allowable lead content to a weighted average of 0.25 percent. This is calculated across wetted surfaces of pipes, pipe fittings, plumbing fittings, fixtures and 0.2 percent for solder and flux.

The Safe Drinking Water Act requires the EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur with an adequate margin of safety. These non-enforceable health goals, based solely on possible health risks, are called maximum contaminant level goals (MCLGs). The EPA has set the maximum contaminant level goal for lead in drinking water at zero because lead is a toxic metal that can be harmful to human health even at low exposure levels. Lead is persistent, and it can bioaccumulate in the body over time.

Measures to Reduce Lead in Drinking Water at Home: Flush your pipes before drinking. 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. Use only cold water for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. Run cold water until it becomes as cold as it can get. Note that boiling water will NOT get rid of lead contamination. Bathing and showering should be safe for you and your children, even if the water contains lead over EPA's action level; human skin does not absorb lead in water. This information applies to most situations and to a large majority of the population, but individual circumstances may vary.

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 (800-426-4791) or at http://www.epa.gov/safewater/lead.

DEFINITION OF TERMS / UNITS OF MEASUREMENTS

DEFINITION OF TERMS

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 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 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.

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.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

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. ALGs allow for a margin of safety.

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.

ND: Not detectable at testing limits. **N/A:** Not applicable

Turbidity: Is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of the filtration system and disinfectants.

UNITS OF MEASUREMENTS

ppb: Micrograms Per Liter or Parts Per Billion (or url), or one ounce in 7,350,000 gallons of water.

ppm: Milligrams Per Liter or Parts Per Million (or mg/l), or one ounce in 7,350 gallons of water.

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

%<0.3NTU: Percent samples less than 0.3 NTU

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

mrem: Millirems per year (a measure of radiation absorbed by the body)

SOURCE WATER ASSESSMENT

In 2021, the Village of Lyons purchased approximately 330 million gallons of Chicago surface water from the Village of McCook. The Village receives all of it's water from the newly constructed 12" supply main that connects Lyons to the Village of McCook's water supply grid. Water from this main is pumped into a reservoir / pumping station complex where it is sampled, chlorinated and treated to maintain water quality standards set by the IEPA. After treatment, the Village pumps the water into it's local supply grid where it is distributed to residents and retail customers.

SOURCE WATER ASSESSMENT SUMMARY

The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with 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 Source Water Assessment Program for our supply.

Further information on our community water supply's Source Water Assessment Program is available by calling Chicago's DWM at 312-742-2406 or by going online at http://dataservices.epa.illinois.gov/swap/factsheet.aspx

SUSCEPTIBILITY OF CONTAMINATION

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 of 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.

SOURCE OF DRINKING WATER CONTAMINATION

The sources of drinking water (both tap water and bottled water) includes 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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. 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 process 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.

THE CITY OF CHCIAGO TESTING INFORMATION

2021 Voluntary Monitoring

The City of Chicago has continued monitoring for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. No Cryptosporidium or Giardia was detected in source water samples collected in 2021. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium 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 Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced.

In 2021, 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 DWM's Water Quality Division at 312-744-8190. 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.

http://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html

For more information, please contact
Andrea R.H. Cheng, Ph.D., P.E., Commissioner Acting Commissioner
at 312-744-7001

Chicago Department of Water Management
1000 East Ohio Street
Chicago, IL 60611
Attn: Andrea Cheng

REGULATED CONTAMINANTS TABLES

Regulated Disinfectants & Disinfection By-Products	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Units	Municipality	Violation	Collection Date	Likely Source of Contaminants
Chlorine	MRDLG = 4	MRDL = 4	1	0.7 — 1	ppm	Lyons	N	12/31/2021	Water additive used to control microbes.
	MRDLG = 4	MRDL = 4	1.4	1.2—1.48	ppm	McCook	N	12/31/2021	
	MRDLG = 4	MRDL = 4	1	1 — 1	ppm	Chicago	N	12/31/2021	
Haloacetic Acids (HAA5)	No Goal	60	20	10.3 — 24.4	ppb	Lyons	N	2021	By-product of drinking water disinfection.
	No Goal	60	15	15—15	ppb	McCook	N	2021	
	No Goal	60	13	7.2—19	ppb	Chicago	N	2021	
Total Trihalomethanes (TTHM)	No Goal	80	45	19.3 — 61.9	ppb	Lyons	N	2021	
	No Goal	80	38	37.7—37.7	ppb	McCook	N	2021	
	No Goal	80	30	13.6—39	ppb	Chicago	N	2021	
Inorganic Contaminants									
Barium	2	2	0.0203	0.0200—0.0203	ppm	Chicago	N	2021	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	4	4.0	0.77	0.65—0.77	ppm	Chicago	N	2021	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (Measured as Nitrogen)	10	10	0.28	0.28—0.28	ppm	Chicago	N	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Total Nitrate & Nitrite (Measured as Nitrogen)	10	10	0.28	0.28—0.28	ppm	Chicago	N	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	N/A	N/A	9.99	9.79—9.99	ppm	Chicago	N	2021	Erosion from naturally occurring deposits. Used in water softener regeneration.
Sulfate	N/A	N/A	27.4	26.9—27.4	ppm	Chicago	N	2021	Erosion of naturally occurring deposits.
Radio Active & Synthetic Organic Contaminants									
Combined Radium 226/228	0	5	0.95	0.83—0.95	pCi/L	Chicago	N	02/04/2020	Erosion of natural deposits.
Gross alpha excluding radon and uranium	0	15	3.1	2.8—3.1	pCi/L	Chicago	N	02/04/2020	Erosion of natural deposits.

Coliform Bacteria

Total Coliform Maximum Contaminant Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. Positive E. Coli or Fecal Coliform Samples	Municipality	Violation	Likely Source of Contaminants
0	5% of Monthly Samples are positive.	0.6	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive.	3	Chicago	N	Naturally present in the environment.

Lead and Copper

	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Municipality	Violation	Date Sampled	Likely Source of Contaminants
Lead	0	15	5.28	0	ppb	Lyons	N	09/02/2020	Corrosion of household plumbing systems; Erosion of natural deposits.
	0	15	5.6	1	ppb	Chicago	N	2021	
Copper	1.3	1.3	0.1	0	ppm	McCook	N	09/25/2018	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
	1.3	1.3	0.13	0	ppm	Chicago	N	2021	

Turbidity	Limit (Treatment Technique)	Level Detected	Municipality	Violation	Likely Source of Contaminants
Highest Single Measurement %	1 NTU	0.2 NTU	Chicago	N	Soil Runoff.
Lowest Monthly % meeting Limit	0.3 NTU	100%	Chicago	N	Soil Runoff.

Total Organic Carbon:
The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

2021 VIOLATION SUMMARY TABLE

Village of Lyons Violation Table

Violation Type	Violation Begin	Violation End	Violation Explanation
NONE	N/A	N/A	NONE