

City of Harvey 15320 Broadway Harvey, IL 60426



HARVEY WATER QUALITY REPORT 2022

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.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in 2022.

Level Found: This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

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

Data 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. Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>Treatment Technique (TT</u>): A required process intended to reduce the level of a contaminant in drinking water. nd: Not detectable at testing limits.

n/a: Not applicable

mg/l: milligrams per litre or parts per million - or more ounce in 7,350 gallons of water

ug/I: micrograms per litre or parts per billion - or one ounce in 7,350,000 gallons of water

Locational Running Annual Average (LRAA): The average of 4 consecutive quarterly results at each monitored sample location. The LRAA should not exceed 80 ug/L for TTHM and 60 ug/L for HAA5.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. Maximum Residual Disinfectant Level (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

Level 1 Assessment – A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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.

<u>UNREGULATED CONTAMINANTS</u>: 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.

 $\underline{\textbf{FLUORIDE}}$ - Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommended an optimal fluoride range of 0.7 mg/L with a range of 0.6 mg/L 0.8 mg/L.

<u>SODIUM</u> - There is not a 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.

Chicago Department of Water Management Detected Contaminants • 2022 Water Quality Data

Contaminant (unit of measurement)	MCLG	MCL	Highest Level Detected	Range of Detection	Violation	Date of Sample
Microbial Contaminants						
TOTAL COLIFORM Bacteria (% pos/mo); Naturally present in the environment FECAL COLIFORM AND E. COLI (% pos/mo); Human and animal fecal waste	0	5% 0	0.4% 0	N/A N/A	N N	
Turbidity Data			-	,		
TURBIDITY (NTU/Lowest Monthly %≤0.3 NTU); Soil runoff	NA	TT mit 95% <u><0.</u>	(Lowest Monthly %) 100%	100%-100.0%		
TURBIDITY (NTU/Highest Single Measurement); Soil runoff	NA	TT nit 1 NTU 1	0.20	N/A		
Inorganic Contaminants	(Lin					
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal Refineries; Erosion of Natural deposits.	2	2	0.0201	0.0193-0.0201		
COPPER (ppm)**; Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives	1.3	AL=1.3	0.12 (90th percentile)	0 sites exceeding AL	Ν	6/1/22- 9/30/22
LEAD(ppb)**; Corrosion of household plumbing systems; Erosion of natural deposits	0	AL=15	7.7 (90th percentile)	1 site exceeding AL	Ν	6/1/22- 9/30/22
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage: Erosion of natural deposits.	10	10	0.30	0.30-0.30		
TOTAL NITRATE & NITRATE (as NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage: Erosion of natural deposits.	10	10	0.30	0.30-0.30		
Disinfectants/Disinfections By-Products						
TTHM (TOTAL TRIHALOMETHANES) (ppb)*; By-product of drinking water disinfection	N/A	80	25.1	12.8-37.6	Ν	
HAA5 (HALOACETIC ACIDS) (ppb)*; By-product of drinking water disinfection	N/A	60	11.9	5.8-15.2	Ν	
CHLORINE (as C12) (ppm) Drinking water disinfectant	4.0	4.0	1	1-1	Ν	
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.	N/A	N/A	27.1	25.8-27.1		
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	N/A	N/A	9.08	8.56-9.08		
<u>State Regulated Contaminants</u> FLUORIDE (ppm). Water additive which promotes strong teeth.	4	4	0.76	0.63-0.76	N	
Radioactive Contaminants						
COMBINED RADIUM 226/228 (pCi/L) Decay of natural and man-made deposits.	0	5	0.95	0.83-0.95	Ν	2/4/2020
GROSS ALPHA excluding radon and uranium (pCi/L). Decay of natural and man-made deposits.	0	15	3.1	2.8-3.1	Ν	2/4/2020

Unit of Measurement: ppm - Parts per million or milligrams per liter ppb - Parts per billion, micrograms per liter NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

%<0.3 NTU - Percent samples less than 0.3 NTU PCi/L - Piccouries per liter, used to measure radioactivity Note: TTHM, HAA5, and Chlorine are for the Chicago Distribution system. *Data expressed as LRAA - Locational Running Annual Average (See Definition of Terms for Details); **The state requires us to monitor for certain contaminants less than once per year because the concentration of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred. Compliance monitoring for lead and copper is conducted every 3 years. Radiochemical contaminant monitoring is conducted every 6 years.

HARVEY ANNUAL DRINKING WATER QUALITY REPORT IL 0311110

Annual Water Quality Report for the period of January 1 to December 31, 2022. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. The source of drinking water used by HARVEY is Purchased Surface Water. For more information regarding this report contact:

Name: Ross A. Burgess • Phone: 708-331-0032

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

Source of Drinking Water

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 and, in some cases, radioactive material, and can pickup 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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

- 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 byproducts 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.

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/CDC guidelines on appropriate means to lessen the risk of infection by Crytosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

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.

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 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 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.

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 any of our regularly scheduled meetings. The source water assessment for our supplies has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 708-210-5340 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 Effort, you may access the Illinois EPA website at:

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

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 contaminate 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.

Source Water Information

Source Water Name: CC 01-Page PS RSVRS Chlor Hsp Distr FF IL0316000 TP 02: Lake; CC02-DISCH - Dist from HSP's ICRR FF IL0316000 TP01: Lake

City of Chicago, Department of Water Management Source Water Assessment Summary For the 2022 Consumer Confidence Report (CCR)

Source Water Location

The City of Chicago 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 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 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. Further information on our community water supply's Source Water Assessment Program is available by calling DWM at 312-742-2406.

2022 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 2022. 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 2022, CDWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEP A 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

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.

For more information, please contact Andrea R.H. Cheng, Ph.D., P.E. Commissioner, 312-744-7001; Chicago Department of Water Management, 1000 East Ohio Street, Chicago, IL 60611, Attn: Andrea R.H. Cheng, Ph.D., P.E. 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.

City of Harvey 2022 Regulated Contaminants

Disinfectants & Disinfectant By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2022	0.6	0.4-0.6	MRDLG=4	MRDL=4	ppm	Ν	Water additive used to control microbes
Haloacetic Acids (HAA5)*	2022	16	7.09-21.4	No goal for total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2022	38	16.04-50.9	No goal for total	80	ppb	Ν	By-product of drinking water disinfection

City of Harvey 2022 Regulated Contaminants Detected 90th # Sites Units Violation Action Date Likely Source MCLG Level (AL) Lead and Copper Sampled Percentile Over AL of Contamination Erosion of natural deposits, Leaching from wood preservatives; Corrosion of household plumbing systems 9/22/2020 Copper 1.3 1.3 0.153 0 ppb N 9/22/2020 Lead 0 15 5.16 0 ppb N Corrosion of household plumbing systems Erosion of natural deposits. Co M

Coliform Bacteria						
Max. Contaminant Level Goal	Total Coliform Max. Contaminant Level	, v	Fecal Coliform or E. Coli Max. Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	1		0	Ν	Naturally present in the environment.