

2024 Water Quality Data

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT
0316000 CHICAGO

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 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 2024.

Range of Detections: 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 concentration does not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

Treatment Technique (TT): A required process intended to reduce the level of contaminants in drinking water.

NIA: Not applicable

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% S0.3 NTU) <i>Soil runoff</i>	NIA	TT (Limit: 95%;<.3 NTU)	Lowest Monthly%: 99.7%	99.7%- 100%		
Turbidity (NTU/Highest Single Measurement) <i>Soil runoff</i>	NIA	TT (Limit 1 NTU)	0.39	NIA		
Inorganic Contaminants						
Barium (ppm) <i>Discharge of drilling wastes: Discharge from metal refineries: Erosion of natural deposits</i>	2	2	0.0203	0.0198 - 0.0203		
Nitrate (as Nitrogen) (ppm) <i>Runoff from fertilizer use: Leaching from septic tanks. sewage: Erosion of natural deposits</i>	10	10	0.39	0.36 -0.39		
Total Nitrate & Nitrite (as Nitrogen) (ppm) <i>Runoff from fertilizer use: Leaching from septic tanks sewage: Erosion of natural deposits</i>	10	10	0.39	0.36 - 0.39		
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>	NIA	NIA	28.2	253 - 28.2		
Sodium (ppm) <i>Erosion of naturally occurring deposits: Used as water softener</i>	N/A	N/A	9.18	8.87-9.18		
State Regulated Contaminants						
Fluoride (ppm) <i>Water additive which promotes strong teeth</i>	4	4	0.76	0.67 - 0.76		
Radioactive Contaminants						
Combined Radium (226/228) (pCi/L) <i>Decay of natural and man made deposits.</i>	0	5	0.95	0.83 - 0.95		02-04-2m0
Gross Alpha excluding radon and uranium (pCi/L) <i>Decay of natural and man made deposits.</i>	0	15	3.1	2.8 - 3.1		02-04-2020

Fifth Unregulated Contaminant Monitoring Rule (UCMR 5)

As required by UCMR 5, EPA's latest monitoring cycle, the City of Chicago has completed monitoring for 25 perfluorinated & polyfluorinated alkyl substances, 4 perfluorinated alkyl acids, and lithium in its drinking water for four quarters in 2024. None of the contaminants were detected in our drinking water.

Units of Measurement

ppm: Parts per million, or milligrams per liter

pCi/L: Parts per billion, or milligrams per liter

NTU: Nephelometric turbidity units, used 10 mL of sample in a nephelometer

TT: Treatment technique

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.

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 for monitoring this contaminant is to assist US EPA 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 Public 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.

SOURCE WATER ASSESSMENT SUMMARY

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 Sawyer 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.

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.

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 of all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance where 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 or by going on line at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>

2024 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 2024. 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 2024, 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.ci1vofchica2:o.org/ci1v/en/depl1s/water/supp_info/water_quality_resultsandrepot1s/city_of_chicago_emer2:incontaminantstudv.htm

For more information, please contact
Patrick Schwer
At 312-744-8190

Chicago Department of Water Management
1000 East Ohio Street
Chicago, IL 60611