

Source of Drinking Water

The sources of drinking water both tapped and bottled water include rivers, lakes, streams, ponds, reservoir 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 materials and can pick up substances resulting from presence of animal or human activity.

Source of Water Chicago

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. Lake Michigan'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 curb structures may serve to attract waterfowl gulls and terns that frequent the Great Lakes areas thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to shore water runoff, marinas, and shoreline point sources due to the influx of groundwater to the lake.

Source of Water Hammond, IN

Illinois EPA considers all surface water sources of public water supply susceptible to pollution problems, hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal, septic systems, and shoreline erosion.

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 match and can be naturally occurring or resulting 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by the EPA safe drinking water hotline at (800) 426-4791.

In order to ensure the tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations established limits for contaminants and 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. 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 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 risks of infection by cryptosporidium and other microbial contaminants is available from the safe drinking water hotline (800) 426-4791.

The City of Calumet purchases water from Hammond, Indiana. Its source water is Lake Michigan, which is surface water. There were no synthetic organic compounds, volatile organic compounds, or any unregulated contaminant's detected in the Finished Water at the entry point to Hammond distribution system. The following table contains the results from Hammond.

Microbial Contaminant's	MCLG	MCL	Level Found	Range of Detection
Turbidity (1%<0.3 NTU)	N/A	TT	100.00%	N/A
Turbidity (NTU) Soil Runoff-Highest Single Measurement	N/A	TT=1NTU Max	.18	.3-0.21

Disinfectants and Disinfectant By-Products	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Haloacetic Acids	4	2.3-5	N/A	60	ppb	No	By-product of Drinking Water Chlorination

Inorganic Contaminant's	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride	.837	.837	4	4	ppm	No	Erosion of Natural Deposits; Water Additive which promotes Strong Teeth; Fertilizer Discharge
Sodium	.11 mg/l	N/A	N/A	N/A	ppm	No	Erosion of Naturally Occurring Deposits

There is not a state or federal MCL for Sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium restricted diet, you should consult a physician about this level of sodium in the water.



For more information regarding this report, contact:

Calumet City Water Department

Gerry Surufka (708) 891-8155

Board Meetings:

2nd and 4th Thursday each month

Este informe contiene informacion muy importante sobre el agua que usted bebe. Si no entiende el contenido o tiene alguna pregunta puede llamar a la oficina de la Alcalde Thaddeus M. Jones al (708) 891-8106.

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 supply has been completed by the Illinois Environmental Protection Agency (EPA). If you would like a copy of their information, please stop by City Hall or call our water operator at (708) 891-8155.

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, you may access the Illinois EPA website.



CALUMET CITY

WATER DEPARTMENT



Mayor of Calumet City
Thaddeus M. Jones



2023

Annual Drinking
Water Quality Report

Annual Drinking Water Quality Report

Calumet City, IL0310390 | January 1 to December 31, 2023



This report is intended to provide you with important information about your drinking water and the efforts made by the Calumet City Water Department to provide safe drinking water.

Calumet City draws 100% of its drinking water from Lake Michigan (20% supplied by Chicago and 80% by Hammond).

Each year, on a monthly basis, our water is tested by State approved laboratories for a wide range of possible contaminants.

This year, as in the years past, our City's water has met all United States Environmental Protection Agency (USEPA) and state drinking water health standards. Our system vigilantly safeguards our water supply.

This report summarizes the quality of water that we provided last year including information on where your water comes from, what it contains, and how it compares to standards set by regulating agencies. We are committed to providing you with information because informed customers are our best allies.

2023 Water Quality Data: Chicago - Hammond

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. MCLG's allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Level Found: This column represents the highest result, unless otherwise noted, during the Consumer Confidence Reports (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.

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 data appears in the column, monitoring for this contaminant was conducted 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.

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

Nd: Not detectable at testing limited.

n/a: Not applicable.

Chicago Table Detected Contaminants

The following table identifies contaminants detected within the past five years. State and federal regulations do not require monitoring for these contaminants, and no Maximum Contaminant Level (MCL) has been established. These detections are for informational purposes only. No mandated health effects language exists. The CCR Rules do not require that this information be reported; however, it may be useful when evaluating possible sources of contamination or characterizing overall water quality.

Microbial Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Date of Sample
TURBIDITY (% < 0.3 NTU) Soil Runoff. Lowest monthly percent meeting limit.	N/A	TT	100%	100%-100%		
TURBIDITY (NTU) Soil Runoff. Highest Single measurement.	N/A	TT=INTU	.25	N/A		
Inorganic Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Date of Sample
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	.0195	.0192 - .0195		
NITRATE (as Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	.33	.29 - .33		
TOTAL NITRATE AND NITRATE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	.33	.29 - .33		
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	MCLG	MCL	Level Found	Range of Detections	Violation	Date of Sample
SULFATE (ppm) Erosion of natural occurring deposits.	N/A	N/A	27.8	25 - 27.8		
SODIUM (ppm) Erosion of natural occurring deposits; Used as water softener.	N/A	N/A	8.71	8.43 - 8.71		
State Regulated Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Date of Sample
FLUORIDE (ppm) Water additive which promotes strong teeth.	4	4	.74	.66 - .74		
Radioactive Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Date of Sample
COMBINED RADIUM (226/228) (pCi/L) Decay of natural and man-made deposits.	0	5	.95	.83 - .95		2/4/2020
GROSS ALPHA excluding radon and uranium. Decay of natural and man-made deposits.	0	15	3.1	2.8 - 3.1		2/4/2020

Definition of Terms

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 systems and disinfectants.

Unregulated Contaminants

A 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 the 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. Illinois Department of Public Health recommends an optimal fluoride range of 0.9 milligrams per liter to 1.2 milligrams per liter.

Sodium

There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium restricted diet, you should consult a physician about this level of sodium in the water.

2023 Regulated Contaminants Detected: Calumet City

Lead and Copper Definitions

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

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 lead in it, you may wish to have your water tested. Information on lead and drinking water, testing methods, and steps you can take to minimize exposure is available from the safe drinking water hotline (800) 426-4791.

Action Level Goals (ALG): The level of a contaminant in drinking water below which there is not known or expected risk to health. ALG's allow for a margin of safety.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Site Over AL	Units	Violation	Likely Source of Contamination
Lead	8/26/2021	0	15	11	0	ppb	N	Corrosion of household plumbing systems. Erosion of natural deposits.
Copper	8/26/2021	1.3	1.3	.154	0	ppm	N	

Water Test Quality Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Maximum Contaminant Level (MCL):

The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the maximum contaminant level goal as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG):

The level of a contaminant in drinking water below which there is no known or expected risks to health. MCLG's allow for a margin of safety.

Level 1 Assessment: A level 1 assessment is a study of the water 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.

ppm: Milligrams per liter or parts per million or one ounce in 7350 gallons of water.

ppb: Micrograms per liter or parts per billion or one ounce in 7,350,000 gallons of water.

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

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

n/a: Not applicable

Av: Regulatory compliance with some MCL's are based on running annual average of monthly samples.

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.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MDR Genes do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Regular Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Disinfectants and Infection By-Products								
Chlorine	2022	1.3	1-2	4	4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	6	1.75 - 12.48	No goal for total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	22	14.96 - 33.3	No goal for total	80	ppb	No	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2023	6.81	0.702-6.81	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronic production waste.
Barium	2023	0.053	0.00949-0.053	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2023	4.65	4.52-4.65	100	100	ppb	No	Discharge from steel and pulp mills. Erosion of natural deposits.
Fluoride	2023	0.93	0.45-0.93	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2023	1.24	0-1.24	N/A	1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2023	15.7	6.69 -15.7	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Selenium	2023	1.08	0.909-1.08	50	50	ppb	No	Discharge from petroleum and metal refinery; Erosion of natural deposits; Discharge from mines.
Sodium	2023	34800	30300-34800	N/A	N/A	ppb	No	Erosion from naturally occurring deposits. Use in water softener regeneration.
Zinc	2023	0.00956	0.00289-0.00956	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2023	1.78	0 - 1.78	0	5	pCi/L	No	Erosion of natural deposits.
Gross Alpha excluding Radon and Uranium	2023	4.39	3.44 - 4.39	0	15	pCi/L	No	Erosion of natural deposits.

Coliform Bacteria	Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest Number of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total # of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
Fecal Coliform or E. Coli	0	1 positive monthly sample	2.3	0	5	No	Naturally present in the environment.