

# Annual Drinking Water Quality Report for Calendar Year 2023 IL0310690



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. This report includes drinking water facts, information on violations (if applicable), and contaminants detected in your drinking water supply during calendar year 2023. Each year, we will provide you a new report. If you need help understanding this report or have general questions, please contact the person listed below.

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

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#### Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

Our source of water comes from the City of Chicago Purchased Surface Water.

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 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.

#### Other Facts about Drinking Water

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 EPA's Safe Drinking Water Hotline at (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. 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 Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

#### Source Water Assessments

Source water protection (SWP) is a proactive approach to protecting our critical sources of public water supply and assuring that the best source of water is being utilized to serve the public. It involves implementation of pollution prevention practices to protect the water quality in a watershed or wellhead protection area serving a public water supply. Along with treatment, it establishes a multi-barrier approach to

assuring clean and safe drinking water to the citizens of Illinois. The Illinois EPA has implemented a source water assessment program (SWAP) to assist with wellhead and watershed protection of public drinking water supplies.

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 Village Board Meetings which are held twice a month – 1st and 3rd Monday at 6:30 p.m., at the Dolton Village Hall, 14122 Martin Luther King Jr. Drive, Dolton, IL. 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 City Hall or call our water operator at (708) 849-4000To 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 at <a href="http://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</a>.

Source of Water: Chicago in Illinois EPA considers all surface water sources of public water supply susceptible to potential 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.

### 2023 Regulated Contaminants Detected

The next several tables summarize contaminants detected in your drinking water suppl: Since water is purchased from City of Chicago, results indicated with an asterisk (\*) were provided to us by them.

Here are a few definitions and scientific terms which will help you understand the information in the contaminant detection tables.

AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water
	system must follow.
Avg	Regulatory compliance with some MCLs is based on running annual average of monthly samples.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to
	the Maximum Contaminant Level Goal 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 disinfectant allowed in drinking water.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of disinfectant in drinking water below which there is no known or
	expected risk to health. MRDLGs allow for a margin of safety.
N/A	Not Applicable
NTU	Nephelometric Turbidity Units
pCi/L	picocuries per liter ( a measure of radioactivity)
ppb	Parts per billion or micrograms per liter (ug/L) - or one ounce in 7,350,000 gallons of water.
ppm	Parts per million or milligrams per liter (mg/L) - or one ounce in 7,350 gallons of water.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Lead and	Copper Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2023	1.3	1.3	0.0201	0	ppm	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2023	0	15	2.13	0	ppb	NO	Corrosion of household plumbing systems; erosion of natural deposits.

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. Village of Dolton is responsible for providing high quality drinking water, but 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.

Disinfectants & Disinfection Byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	1.1	0.7-1.3	4	4	ppm	NO	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	14	8.0-23.1	60	No Goal for the total	ppb	NO	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	34	19.81-52.3	80	No Goal for the total	ppb	NO	By-product of drinking water disinfection.

#### Violation Summary Table

The following table(s) lists all violations that occurred during 2023. We included a brief summary of the actions we took following notification of the violation.

	Violation Type	Violation Duration Start Date – End date	Violation Explanation
Consumer Confidence Rule	CCR ADEQUACY/AVAILABILITY/CONTENT	7-31-2023.	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.
Public Notification Rule	PUBLIC NOTICE RULE LINKED TO VIOLATION	11/05/2023	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

Contaminant (unit of measurement)	MCLG	MCL	Highest	Range	Violation	Date of
Typical Source of Contaminant		10.00	Level Detected	Of Detections		Sample
MICROBIAL CONTAMINANTS						
TOTAL COLIFORM BACTERIA (% pos/mo)	0	5%	0.4%	N/A	N	
Naturally present in the environment						
FECAL COLIFORM AND E. COLI (# pos/mo)	0	0	0	N/A	N	
Human and animal fecal waste		(L	owest Monthly	%)		
TURBIDITY (NTU/Lowest Monthly % ≤ 0.3 NTU)	N/A	TT	100%	100%-100%	N	
Soil runoff		(L	.imit: 95% ≤ 0.3 N	ITU)		
TURBIDITY (NTU/Highest Single Measurement)	N/A	TT	0.25	N/A	N	
Soil runoff		(L	imit: 1 NTU max			
INORGANIC CONTAMINANTS						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0195	0.0192 -0.0195	N	
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preserva- tives	1.3	AL = 1.3	0.079 (90 <sup>th</sup> percentile)	0 sites exceeding AL	N	6/1/23- 9/30/23
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits	0	AL= 15	7.2 (90 <sup>th</sup> percentile)	0 sites exceeding AL	N	6/1/23- 9/30/23
NITRATE (AS NITROGEN) (ppm)	10	10	0.33	0.29 - 0.33	N	
Runoff from fertilizer use; Leaching from septic tanks, sewage: Erosion of natural depo	sits					
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm)	10	10	0.33	0.29 - 0.33	N	
DISINFECTANTS \ DISINFECTION BY-PROD	UCTS					
TTHM [TOTAL TRIHALOMETHANES] (ppb) *	N/A	80	32.6	15.9 - 51.0	N	
By-product of drinking water disinfection						
HAA5 [HALOACETIC ACIDS] (ppb) *	N/A	60	16.4	6.0 - 26.9	N	
By-product of drinking water disinfection						
CHLORINE (as Cl <sub>2</sub> ) (ppm)  Drinking water disinfectant	4.0	4.0	1	0 – 1	N	
TOC [TOTAL ORGANIC CARBON]						
The percentage of Total Organic Carbon (TOC) removal was	measured ea	ich month a	and the system n	net all TOC removal	requirements se	et by IEPA.
JNREGULATED CONTAMINANTS						
SULFATE (ppm)	N/A	N/A	27.8	25.0 - 27.8		
Erosion of naturally occurring deposits						
SODIUM (ppm)	N/A	N/A	8.71	8.43 - 8.71		
crosion of naturally occurring deposits; Used as water softer	er					
STATE REGULATED CONTAMINANTS						
FLUORIDE (ppm)	4	4	0.74	0.66 - 0.74	N	
Vater additive which promotes strong teeth						
RADIOACTIVE CONTAMINANTS						
COMBINED RADIUM 226/228 (pCi/L) ** Decay of natural and man-made deposits	0	5	0.95	0.83 - 0.95	N	2/04/2020
GROSS ALPHA excluding Radon & Uranium (pCi/L) **	0	15	3.1	2.8 - 3.1	N	2/04/2020

# **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 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Highest Level Detected:** This column represents the highest single sample reading of a contaminant of all the samples collected in 2023, except where a specific date is indicated.

Range of Detections: This column represents a range of individual sample results, from lowest to highest, that were collected during the Consumer Confidence Report (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 date appears in the column, monitoring for this contaminant was conducted during Consumer Confidence Report (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 limits; N/A: Not applicable Locational Running Annual Average (LRAA): The average of 4 consecutive quarterly results at each monitored sample location. The LRAA should not exceed 80 μg/L for TTHM and 60 μg/L for HAAS.

Water Quality Data Table Footnotes

#### **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 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.

#### **FLUORIDE**

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health has recommended an optimal fluoride level of 0.7 mg/L, with a range of 0.6 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.

#### Unit of Measurement

- ppm Parts per million, or milligrams per liter (mg/L)
- ppb Parts per billion, or micrograms per liter (μg/L)
- NTU Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.
- % ≤0.3 NTU Percent of samples less than or equal to 0.3 NTU
- pCi/L Picocuries per liter, used to measure radioactivity.
- mrem: millirems per year, a measure of radiation absorbed by the body

Note: TTHM, HAAS, 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 concentrations 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 during the CCR calendar year. If any of these contaminants were detected the last time they were sampled, they are included in the table along with the date that the detection occurred.

Radiochemical contaminant monitoring is conducted every 6 years.

# City of Chicago Department of Water Management Source Water Assessment Summary

### 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 SWAP for our supply. Further information on our community water supply's SWAP is available by calling the City of Chicago, Department of Water Management at 312-744-6635.

## 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.

## SUSCEPTIBILITY TO CONTAMINATION

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very natureofsurfacewaterallowscontaminantstomigrate 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 stormwater 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 the City of Chicago, Department of Water Management at 312-744-6635.

# 2023 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 2023. 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 2023, DWM 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, PFAS/PFOS, and other emerging contaminants are posted on the City's website which can be accessed at the following address below:

www.chicago.gov/city/en/depts/water/ supp\_info/water\_quality\_resultsandreports.html

# **Cross-Connection Control**

The Chicago Department of Water Management is required by the Illinois EPA to routinely survey all water services connected to our public drinking water supply to help us identify and correct "cross-connections", which are unprotected or improper connections to the public drinking water system that may cause contamination or pollution to enter the system. Please fill out the survey online at: <a href="https://www.chicagoccr.org">www.chicagoccr.org</a>