## 2021 Water Quality Data

## DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT 0316000 CHICAGO

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 2021.

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

<u>Date of Sample:</u> 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.

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

N/A: Not applicable

	DET	ECTED CONTAM	INANTS			
Contaminant (unit of measurement) Typical source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
		Turbidity Data				SAL WINE
Turbidity (NTU/Lowest Monthly % ≤0.3 NTU)  Soil runoff	N/A	TT(Limit: 95%≤0.3 NTU)	Lowest Monthly %: 100%	100% - 100%		
Turbidity (NTU/Highest Single Measurement) Soil runoff	N/A	TT(Limit 1 NTU)	0.20	N/A		
	I	norganic Contamii	nants			
Barium (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0203	0.0200 - 0.0203		
Nitrate (as Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.28	0.28 - 0.28		
Total Nitrate & Nitrite (as Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.28	0.28 - 0.28		
	Tota	al Organic Carbon	(TOC)			di Hara
TOC	T		ured each month and the syste	em met all TOC remova	ıl requirements set b	y IEPA.
		regulated Contam		rkome (ES)		
Sulfate (ppm) Erosion of naturally occurring deposits	N/A	N/A	27.4	26.9 – 27.4		
Sodium (ppm) Erosion of naturally occurring deposits; Used as water softener	N/A	N/A	9.99	9.79 – 9.99		
	State	e Regulated Conta	minants			F-1 1883
Fluoride (ppm) Water additive which promotes strong teeth	4	4	0.77	0.65 – 0.77		
	Ra	dioactive Contami	inants			
Combined Radium (226/228) (pCi/L) Decay of natural and man-made deposits.	0	5	0.95	0.83 - 0.95		02-04-2020
Gross Alpha excluding radon and uranium (pCi/L)  Decay of natural and man-made deposits.	0	15	3.1	2.8 – 3.1		02-04-2020

## Units of Measurement

ppm: Parts per million, or milligrams per liter

ppb: Parts per billion, or micrograms per liter

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

### 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 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 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 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 terms 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 online at http://dataservices.epa.illinois.gov/swap/factsheet.aspx

## 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 At 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.

This notice is being sent to you by:
The City of Chicago
Department of Water Management
Water System ID# IL0316000

# Annual Drinking Water Quality Report

## WESTCHESTER

## IL0313150

Annual Water Quality Report for the period of January 1 to December 31, 2021

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide mafe drinking water.

The source of drinking water used by WESTCHESTER is Purchased Surface Water

For more information regarding this report contact:

Phone 728 548-6889

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable 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 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 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.

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, 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 prinking Water Hotline (800-426-4791).

serious health problems, especially for pregnant is primarily from materials and components If present, elevated levels of lead can cause plumbing components. When your water has been associated with service lines and home plumbing women and young children. Lead in drinking water http://www.epa.gov/safewater/lead rinking Water Hotline or at minimize exposure is available from the Safe lead in your water, you may wish to have your water tested. Information on lead in drinking drinking or cooking. If you are concerned about potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for We cannot control the variety of materials used in ater, testing methods, and steps you can take for several hours, you can minimize the for

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# 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 EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at

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

Source of Water: CHICAGOTHe 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 contraminants 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 terms 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.

CC 01-PUMPING STATION

Source Water Name

FF IL0317580 TP01: LAKE

Type of Water

Report Status Location

WS

04/07/2022 - IL0313150\_2021\_2022-04-07\_08-25-15.PDF

## Lead and Copper

Definitions:

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

Corrosion of household plumbing systems; Erosion of natural deposits.	N	qđđ	N	4.43	ᅜ	0	08/11/2020	Lead
Likely Source of Contamination	Violation	Units	# Sites Over AL	90th Percentile	Action Level (AL)	MCLG	Date Sampled	Lead and Copper Date Sampled

# Water Quality Test Results

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

Regulatory compliance with some MCLs are based on running annual average of monthly samples

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

system on multiple occasions. possible) 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

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 Contaminant Level or MCL:

Level 2 Assessment:

Level 1 Assessment:

Maximum Contaminant Level Goal or 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 residual disinfectant level or The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

Maximum residual disinfectant level goal or MRDIG: 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.

not applicable.

millirems per year (a measure of radiation absorbed by the body)

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

milligrams per liter or parts per million or one ounce in 7,350 gallons of water.

: qďď

na:

mrem:

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

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## Regulated Contaminants

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Highest Level Range of Levels Detected Detected	MCLG	MCL	Units	Violation	Violation Likely Source of Contamination
Chlorine	12/31/2021	Н	0.7 - 1.1	MRDLG = 4	MRDL = 4	mdđ	И	Water additive used to control microbes
Haloacetic Acids (HAA5)	2021	19	12.4 - 19.5	No goal for the total	60	ववेर्वे	И	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2021	42	23.4 - 64.8	No goal for the total	80	qdđ	N	By-product of drinking water disinfection

## Violations Table

## Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Begin Violation End Violation Explanation
LEAD CONSUMER NOTICE (LCR)	12/30/2020	01/13/2021	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.