

City of Oak Forest

Annual Drinking Water Quality Report IL0312190

For the period of January 1 to December 31, 2023

Water Supply:

This report is intended to provide you with important information about your drinking water and the efforts made by the Oak Forest water system to provide safe drinking water. The source of drinking water used by Oak Forest is Purchased Surface Water.

The City of Oak Forest purchased Chicago water from the Village of Oak Lawn IL0312220 TP01: Source water Lake. This water is received into our reservoirs and pumped to the City's local and retail customer base. The water is chlorinated and sampled to maintain the quality as required. We do not supplement or mix our water with any other sources.

For more information regarding this report, contact: Oak Forest Water Department (708) 535 – 4090
Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien

Water Quality:

The City of Chicago's South Water Purification Plant controls the water quality supplied to the City of Oak Forest. The City of Oak Forest provides additional chlorine as necessary to maintain the water quality as delivered to them. Information from the City of Chicago CCR is included in this report for review by the water consumers.

City Testing:

The ***City of Oak Forest*** tests the water supply for chlorine content on a daily basis to maintain the optimum levels for the consumer's needs. On a weekly basis, bacteriological samples are taken. Four times per year, samples are submitted for Total Trihalomethane (TTHM) and Haloacetic Acids (HAA5) Analysis. Samples are also provided for lead and copper monitoring on a schedule established by the IEPA. All testing and reports are performed according to the requirements of IEPA. Samples were collected from April 2023 through December 2023 and submitted for Unregulated Contaminants (UCMR4) on a schedule established by the USEPA. All testing and reports are performed according to requirements of the USEPA. ***The City of Chicago's*** 2023 Water Quality Data is included herein for your information.

City Testing Summary:

Bacteriological samples: 0 Positive monthly sample.

Lead/Copper results: 0 sample exceeding the 15 ppb / 0 exceeding the 1.3 ppm Action Level
90th Percentile – lead = 0.0 ppb / copper = 0.053 ppm

Disinfection/Disinfection By - Products

- **TTHM report:** No sample exceeding the 80 ppb MCL.
Highest level detected – 49 ppb
- **HAA5 report:** No sample exceeding the 60 ppb MCL.
Highest level detected – 19 ppb

2023 Water Quality Data

-Definition of Terms-

Maximum Contaminant Level Goal (MCLG): The level of 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 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.

Maximum Residual Disinfection level Goal (MRDLG): The level of drinking water disinfection below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfection level (MRDL): The highest level of a drinking water disinfection 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 2019.

Range of Detections: This column represents a range of individual samples 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 date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

Action level goal: The level of a contaminant in drinking water which there is no known or expected risk to health. ALGs allow for margin of safety.

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.

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

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

Level 1 Assessment:

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possibly) 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.

MREM: Millirems per year (a measure of radiation absorbed by the body)

PPB or UG/L: Micrograms per Liter or Parts per Billion – or one ounce in 7,350,000 gallons of water.

Na: Not applicable.

ppm: Milligrams Per Liter or Parts Per Million – or one ounce in 7,350 gallons of water

Treatment Technique or TT:

A required process intended to reduce the level of a contaminant in drink water.

Detected Contaminants.

Coliform Bacteria

MCLG	Total coliform MCL	Highest No. of Positive	Fecal Coliform or E. Coli: MCL	Total no. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely source of contamination
0	0 Positive	0		0	None	Naturally present in the environment.

Contaminant (units)	MCLG	MCL	Level Detected	Range of detection	violation	Date of sample	Likely source of contamination
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Inorganic Contaminants

LEAD (ppb)	0	AL = 15	0.0 (90 th percentile)	0 exceeding AL	none	2023	Corrosion of household plumbing systems; Erosion of natural deposits.
COPPER (ppm)	1.3	1.3	0.053 (90 th percentile)	0 exceeding AL	none	2023	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Disinfection/Disinfection By-Products

TTHMs[TOTAL TRIHALOMETHANES](ppb)	n/a	80	49 (Highest level)	18.9 – 63	none	2023	By-product of drinking water disinfection.
HAA5[HALOACETIC ACIDS](ppb)	n/a	60	19 (Highest level)	8.99 – 26.8	none	2023	By-product of drinking water disinfection.
CHLORINE (as Cl ₂) (ppm) 12/31/2022	MRDLG = 4.0	MRDL = 4.0	1	1 – 1.2	none		Water additive used to control microbes.

(Highest value)

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

Sources of Drinking Water:

The sources of drinking water (both tap 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 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 EPA's safe drinking water hotline at (800) 426-4791

In order to ensure that tap water is safe to drink, the 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).

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 Summary:

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 City Council meetings (held on the second and fourth Tuesday of every month at 8:00P.M.). 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 plant operator at 708-687-4050. 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 web site at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact>

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 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.

Educational Information:

1. 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 (800) 426-4791.
2. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).
3. The City of Oak Forest uses the following watering restrictions from May 15 to September 15. Sprinkling is to be done on an odd (address ends in an odd number) or even (address ends in an even number) basis from 7:00 AM until 11:00 AM and 7:00 PM to 11:00 PM. If more stringent restrictions become necessary notification will be given.

The following lawn care recommendations are supplied by the University of Minnesota:

- Water deeply and infrequently. One inch of water per week is ideal.
- Over-watering wastes your money and also removes plant nutrient from the soil.
- Excess watering can cause disease problems in your lawn.

Violation Summary Table

Violation Types

MNR Monitoring Violation (failure to monitor)

MCL Maximum Contaminant Level Violation (level found exceeded regulated standard)

TTV Treatment Technique Violation (failure to meet water treatment process)

RPV Reporting Violation (failure to submit results/required report by the deadline)

*** State only violation (not a federal requirement)

Violations for your system:

Violation Type	Violation Begin	Violation End	Violation Explanation
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No Violations for 2023

DEPARTMENT OF WATER MANAGEMENT
CITY OF CHICAGO
SOURCE WATER ASSESSMENT SUMMARY
FOR THE 2023 CONSUMER CONFIDENCE REPORT (CCR)

Source Water Location

The City of Chicago utilizes Lake Michigan as its source of 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 the 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 source of contamination and determined the susceptibility of 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 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 the DWM at 312-742-2406 or by going online at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>

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 2022. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in 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 drink the possibility of such getting into drinking water system is greatly reduced.

In 2022, the City of Chicago 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 DWMA 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: https://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emerigincontaminantstudy.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.

2023 Water Quality Data

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT
0316000 Chicago

-Definition of Terms-

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

Maximum Residual Disinfectant Level (MRDL): The highest level of 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 2022, except where a specific date is indicated.

Range of Detections: This column represents a range of individual samples 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 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.

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

N/D: Contaminant Not Detected at or above the reporting or testing limit. **N/A:** Not applicable

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

Detected Contaminants

Contaminant (units of measurement) Typical Source of contaminant	MCLG	MCL	Highest level detected (Lowest Monthly %)	Range of detections	Violation	Date of Sample
TURBIDITY (NTU/Lowest Monthly %≤0.3 NTU) Soil Runoff.	N/A	TT (Limit 95%≤0.3 NTU)	100%	100% - 100%	N	
TURBIDITY (NTU/ Highest single measurement.) Soil Runoff.	N/A	TT (Limit 1NTU)	0.25	N/A	N	
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 preservatives	1.3	AL = 1.3	0.079 (90 th percentile)	0 sites exceeding AL	N	6/1/22-9/30/22
Lead (ppb) ** Corrosion of household plumbing systems; Erosion of natural deposits	0	AL = 15	7.7 (90 th percentile)	1 site exceeding AL	N	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	0.33	0.29 – 0.33	N	
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.33	0.29 – 0.33	N	
Total Organic Carbon						
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	27.8	25.0 – 27.8		
SODIUM (ppm) Erosion of naturally occurring deposits; used as water softener.	N/A	N/A	8.71	8.43 – 8.71		
State Regulated Contaminants						
FLUORIDE (ppm) Water additive which promotes strong teeth.	4	4	0.74	0.66 – 0.74	N	
Radioactive Contaminants						
COMBINED RADIUM 226/228 (pCi/L) Decay of natural and man – made deposits	0	5	0.95	0.83 – 0.95	N	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	N	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
% \leq 0.3 NTU: Percent of samples less than or equal to 0.3 NTU
pCi/L: Picocuries per liter, used to measure radioactivity

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 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 this level of sodium in the water.

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 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 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.