

VILLAGE OF BERKELEY
2023 WATER QUALITY – CONSUMER CONFIDENCE REPORT
2022 WATER QUALITY DATA TABLE – WATER SOURCE: BERKELEY

Regulated Contaminants Dated in 2020(collected in 2020 unless otherwise noted)

LEAD AND COPPER

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2020	1.3	1.3	0.043	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2020	0	15	3.8	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

REGULATED CONTAMINANTS

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/22	0.8	0.6 – 1.00	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes
Haloacetic Acids (HAA5)*	2022	11	5.41 –18.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

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

Total Trihalomethanes (TThm)*	2022	39	22.7–52.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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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.

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. The Village of Berkeley 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 drinking 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>.

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT

0316000 CHICAGO

2022 WATER QUALITY DATA

Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected (Lowest Monthly %)	Range of detections	Violation	Date of sample
<u>Turbidity Data</u>						
TURBIDITY (%<0.3 NTU) Soil runoff. Lowest monthly percent meeting limit.	n/a	TT (Limit: 95% ≤ 0.3NTU)	100 %	100 % - 100 %		
TURBIDITY (NTU) Soil runoff. Highest single measurement.	n/a	TT(Limit 1 NTU)	0.30	n/a		
<u>Inorganic Contaminants</u>						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.0201	0.0193 - 0.0201		
NITRATE (As Nitrogen)(ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.30	0.30 - 0.30		
TOTAL NITRATE & NITRITE (ppm) (AS NITROGEN) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.30	0.30 – 0.30		

Detected Contaminants continued

Disinfectants/Disinfection By-Products

TOC (TOTAL ORGANIC CARBON)

The percentage of Total Organic Carbon (TOC) removal was measured each month & the system met all TOC removal requirements set by IEPA

Unregulated Contaminants

SULFATE (ppm)	n/a	n/a	27.1	25.8 – 27.1	
Erosion of naturally occurring deposits					
SODIUM (ppm)	n/a	n/a	9.08	8.56 – 9.08	
Erosion of naturally occurring deposits; Used as water softener					

State Regulated Contaminants

FLUORIDE (ppm)	4	4	0.76	0.63 – 0.76	
Water additive which promotes strong teeth					

Radioactive Contaminants

COMBINED RADIUM (226/228) (pCi/L)	0	5	0.95	0.83 – 0.95	02/04/2020
Decay of natural and man-made deposits					
GROSS ALPHA excluding Radon and uranium (pCi/L)	0	15	3.1	2.8 – 3.1	02/04/2020
Decay of natural and man-made deposits.					

2022 Violation Summary Table

We are pleased to announce that no treatment technique, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2022.

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 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 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.

WATER QUALITY TEST RESULTS

Definition of Terms-

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk of health. ALG's allow for a margin of safety.

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 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 E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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.

Highest Level Detected: This column represents the highest result, unless otherwise noted, during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG's 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 risk to health. MCLGs allow for a margin of safety.

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 that addition of a disinfectant is necessary for control of microbial contaminants.

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 disinfectants to control microbial contaminants.

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

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

Definition of Terms continued

Unit of Measurement

ppm or mg/L - Parts per million, or milligrams per liter – or one ounce in 7,350 gals. H₂O
ppb or ug/L – Parts per billion, or micrograms per liter – or one ounce in 7,350,000 gals. H₂O
mrem – millirems per year (a measure of radiation absorbed by the body)
NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
%<0.3 NTU-Percent samples less than 0.3 NTU
pCi/l - Picocuries per liter, used to measure radioactivity
ND – Analyte not detected at or above the reporting limit

CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT SOURCE WATER ASSESSMENT SUMMARY FOR THE 2022 CONSUMER CONFIDENCE REPORT (CCR)

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 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 City of Chicago, Department of Water Management DWM at 312-742-2406 or by going online at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>

ILLINOIS EPA'S SAMPLING OF PER- and POLYFLUOROALKYL SUBSTANCES (PFAS)

The Illinois EPA collected finished water samples from Chicago's Water System on 10/29/2020 and analyzed the samples for a total of 18 PFAS contaminants. In the notification to Chicago, the Illinois EPA stated that these contaminants were not present in Chicago's drinking water at concentrations greater than or equal to the minimum reporting levels.

2022 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 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 such organisms getting into the drinking water system is greatly reduced.

In 2022, 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 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 access at the following address below:

https://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergingcontaminantsstudy.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 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 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

EDUCATIONAL STATEMENTS REGARDING COMMONLY FOUND DRINKING WATER CONTAMINANTS FOR THE 2022 CONSUMER CONFIDENCE REPORT

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity. Possible contaminants consist of:

- 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 may 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 may also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure the tap water is safe to drink, USEPA prescribes regulations that 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.

We want our valued customers to be informed about their water quality. If you would like to learn more, feel welcome to attend any of our regularly scheduled Village Board Meetings on the 1st and 3rd Tuesday of each month. The source water assessment for our supply has been completed by the Illinois EPA. For more information about Berkeley, view our website at www.berkeley.il.us. If you would like a copy of this information, please stop by the Village Hall or call Paul Smith at 708-449-8840. 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>.

Attention: Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.
("This report contains very important information. Translate it or speak with someone who understands it.")