



CONSUMER CONFIDENCE REPORT

2022 Annual Drinking Water Quality Report

BLUE ISLAND

IL0310240

Annual Water Quality Report for the period of January 1 to December 31, 2022.

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.

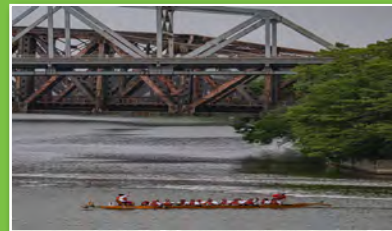
The source of drinking water used by BLUE ISLAND is Purchased Surface Water.

For more information regarding this report contact:

Name Mike Schroeder

Phone 708-597-8605

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



This notice is in reference to the 2022 Consumer Confidence Report on the quality of drinking water in Blue Island for which we received a **favorable rating**. Please read this report for a more detailed message from Mike Schroeder, Blue Island Superintendent of Water and Sewer.

Respectfully,

Mayor Fred Biloto

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 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 Information

Source Water Name	Type of Water	Report Status	Location
CC 01-PS 1 AT 122ND AND HIGHLAND	FF IL0316000 TP02: LAKE	SW	_____
CC02-CONNECTION TO VINCENNES PS		SW	_____

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 the Department of Public Works at 708-597-8605. 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: PRIMARY SOURCE - 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.

2022 Regulated Contaminants Detected

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	08/13/2020	0	15	8.79	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

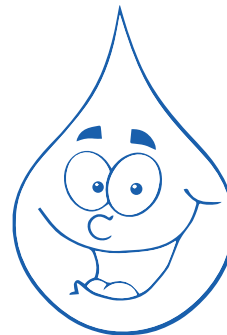
- Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.
- Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if 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.
- Maximum Contaminant Level or 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 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 MRDL:** The highest level of a 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 or 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.
- na:** not applicable.
- mrem:** millirems per year (a measure of radiation absorbed by the body)
- ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
- 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 drinking water.

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	12/31/2022	0.9	0.7 - 1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	11	5.48 - 15.89	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	24	13.5 - 30.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Violations Table

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR REPORT	07/01/2022	07/27/2022	We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.



STAY HEALTHY • DRINK WATER

CHICAGO

2022 Water Quality Data

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT
0316000 CHICAGO

-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 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 2022, 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 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.

ND: 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 results at each monitored sample location. The LRAA should not exceed 80 µg/L for TTHM and 60 µg/L for HAA5.

Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
Microbial Contaminants						
TOTAL COLIFORM Bacteria (% pos/mo) Naturally present in the environment	0	5%	0.4%	N/A	N	
FECAL COLIFORM AND E. COLI (# pos/mo) Human and animal fecal waste	0	0	0	N/A	N	
TURBIDITY (NTU/Lowest Monthly %≤0.3 NTU) Soil runoff	N/A	TT (Limit: 95%≤0.3NTU)	100%	100% – 100%	N	
TURBIDITY (NTU/Highest Single Measurement) Soil runoff	N/A	TT (Limit: 1 NTU max)	0.30	N/A	N	
Inorganic Contaminants						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0201	0.0193 - 0.0201	N	
COPPER (ppm) ** Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives	1.3	AL = 1.3	0.12 (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

Detected Contaminants Continued

<i>Contaminant (unit of measurement) Typical Source of Contaminant</i>	<i>MCLG</i>	<i>MCL</i>	<i>Highest Level Detected</i>	<i>Range of Detections</i>	<i>Violation</i>	<i>Date of Sample</i>
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	N	
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.30	0.30 - 0.30	N	

Disinfectants\Disinfection By-Products

TTHM [TOTAL TRIHALOMETHANES] (ppb) * By-product of drinking water disinfection	N/A	80	25.1	12.8 – 37.6	N	
HAA5 [HALOACETIC ACIDS] (ppb) * By-product of drinking water disinfection	N/A	60	11.9	5.8 – 15.2	N	

CHLORINE (as Cl2) (ppm) Drinking water disinfectant 4.0 4.0 1 1 – 1 N

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	27.1	25.8 – 27.1		
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	N/A	N/A	9.08	8.56 – 9.08		

State Regulated Contaminants

FLUORIDE (ppm) Water additive which promotes strong teeth	4	4	0.76	0.63 – 0.76	N	
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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 and uranium (pCi/L) ** Decay of natural and man-made deposits.	0	15	3.1	2.8 – 3.1	N	2/04/2020

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 has recommended 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.

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.

Unit 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.