# Annual Drinking Water Quality Report

### CARLYLE

### IL0270300

Annual Water Quality Report for the period of January 1 to December 31, 2024

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

CARLYLE is Surface Water

For more information regarding this report contact:

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

In order to ensure that tap water is safe to Source of Drinking Water drink, EPA prescribes regulations which limit The sources of drinking water (both tap water and the amount of certain contaminants in water bottled water) include rivers, lakes, streams, provided by public water systems. FDA ponds, reservoirs, springs, and wells. As water regulations establish limits for contaminants travels over the surface of the land or through the in bottled water which must provide the same ground, it dissolves naturally-occurring minerals protection for public health. and, in some cases, radioactive material, and can pick up substances resulting from the presence of Some people may be more vulnerable to animals or from human activity. contaminants in drinking water than the Contaminants that may be present in source water general population. include: Microbial contaminants, such as viruses and Immuno-compromised persons such as persons bacteria, which may come from sewage treatment with cancer undergoing chemotherapy, persons plants, septic systems, agricultural livestock who have undergone organ transplants, people with HIV/AIDS or other immune system operations, and wildlife. disorders, some elderly and infants can be Inorganic contaminants, such as salts and particularly at risk from infections. These metals, which can be naturally-occurring or result people should seek advice about drinking from urban storm water runoff, industrial or water from their health care providers. domestic wastewater discharges, oil and gas EPA/CDC guidelines on appropriate means to production, mining, or farming. lessen the risk of infection by Cryptosporidium and other microbial Pesticides and herbicides, which may come from contaminants are available from the Safe variety of sources such as agriculture, urban storm Drinking Water Hotline (800-426-4791). water runoff, and residential uses. Organic chemical contaminants, including Lead can cause serious health problems, synthetic and volatile organic chemicals, which are especially for pregnant women and young by-products of industrial processes and petroleum children. Lead in drinking water is primarily production, and can also come from gas stations, from materials and components associated with urban storm water runoff, and septic systems. the service lines and home plumbing. The drinking water supplier is responsible for Radioactive contaminants, which can be providing high quality drinking water and naturally-occurring or be the result of oil and gas removing lead pipes, but cannot control the production and mining activities. variety of materials used in plumbing components in your home. You share the Drinking water, including bottled water, may responsibility for protecting yourself and reasonably be expected to contain at least small your family from the lead in your home amounts of some contaminants. The presence of plumbing. You can take responsibility by contaminants does not necessarily indicate that identifying and removing lead materials water poses a health risk. More information about within your home plumbing and taking steps to contaminants and potential health effects can be reduce your family's risk. Before drinking obtained by calling the EPAs Safe Drinking Water tap water, flush your pipes for several Hotline at (800) 426-4791. minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standard Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water you may wish to have your water tested, contact Andy Wennerstrom at 618-594-3321. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

#### Source Water Information

Source Water Name		Type of Water	Report Status	Location
IN60043-KASKASKIA RIVER	0.5 MI S OF CARLYLE RESE	SW	Active	_0.5 MI S of Carlyle Rese

#### 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 <u>1\_(618)\_594-3321</u>. 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: CARLYLEIllinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface 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.

#### Lead and Copper

Definitions:

Action Level: 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 to health. ALGs allow for a margin of safety.

Copper Range: 0.006 to 0.36 ppm Lead Range: 0 to 2.5 ppb

To obtain a copy of the system's lead tap sampling data:  $\frac{618-594-3321}{0}$ Our Community water supply has developed a service line material inventory To Obtain a copy of the system's service line inventory:  $\frac{618-594-3321}{0}$ 

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/20/2023	1.3	1.3	0.24	0	ppm	Ν	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	07/20/2023	0	15	1.1	0	ppb	Ν	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.

# Water Quality Test Results

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.

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines	2024	2.4	1.4 - 3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2024	47	32.6 - 42.8	No goal for the total	60	ppb	Ν	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	49	31.5- 44.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	5 MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2024	2	1.5 - 1.5	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2024	0.049	0.049 - 0.049	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2024	0.6	0.644 - 0.644	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2024	1	1.2 - 1.2	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2024	11	11 - 11			ppb	Ν	Erosion from naturally occuring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	S MCLG	MCL	Units	Violation	Likely Source of Contamination

Regulated Contaminants

Combined Radium 226/228	11/02/2021	0.825	0.825 - 0.825	0	5	pCi/L	Ν	Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2024	1	0 - 0.88	3	3	ppb	Ν	Runoff from herbicide used on row crops.
Simazine	2024	0.71	0 - 0.71	4	4	ppb	Ν	Herbicide runoff.

# Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.2 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	Ν	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of quality and the effectiveness of our filtration system and disinfectants.

### Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.