Consumer Confidence Report - Annual Drinking Water Quality Report – Carbon Cliff, Illinois # IL1610100

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 Carbon Cliff is groundwater.

For more information regarding this report, contact: ION Environmental Solutions, Chad McCleary at 563-299-2214.

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 land's surface 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 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from various sources such as agriculture, urban stormwater 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 stormwater 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 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 that limit the number 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 people, such as people with cancer undergoing chemotherapy, people 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 healthcare 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.

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 drinking water supplier is responsible for providing high-quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry, or running 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 Chad McCleary at 563-299-2214. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure are available at http://www.epa.gov/safewater/lead.

Source Water Information

Source Water Name WELL 1 (31850)	150 GPM	Type of Water GW	Report Status	Location 106 1 st Avenue, Carbon Cliff
WELL 2 (31851)	130GPM SUBMERSIBLE	GW		106 1 st Avenue, Carbon Cliff
WELL 3 (01092)	ORCHARD LANE CARBON CLIFF	GW		3200 Orchard Lane, Carbon Cliff
WELL 4 (01093)	ORCHARD LANE CARBON CLIFF	GW		3200 Orchard Lane, Carbon Cliff

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 Illinois EPA has completed the source water assessment for our supply. If you want a copy of this information, please stop by the Village Hall or call our water operator at 563-299-2214. 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: Carbon Cliff

Based on information obtained in a Well Site Survey published in 1989 by the Illinois EPA, several potential sources are located within 1,000 feet of two of the wells. The Illinois EPA has determined that the Carbon Cliff Community Water Supply's source water is not susceptible to contamination. This determination is based on a number of criteria, including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and available hydrogeologic data on the wells. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Carbon Cliff Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper siting conditions; a hydraulic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this system's groundwater supply.

2024 Regulated Contaminants Detected

Lead and Copper

Definitions:

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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: No Detect to 118 ppm Lead Range: No Detect to 10 ppb

To obtain a copy of the system's lead tap sampling data: <u>cmccleary@ionenvironmental.com</u>

Our Community Water Supply has developed a service line material inventory. To obtain a copy of the system's service line inventory: <u>cmccleary@ionenvironmental.com</u>

Lead and Copper	Date Sampled	MCLG	Action Level	90 th	# Sites Over	Units	Violation	Likely Source of Contamination
			(AL)	Percentile	AL			
Copper	2024	1.3	1.3	0.0981	0	ppm	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 is based on running an 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-	Collection	Highest Level	Range of Levels					
products	Date	Detected	Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2024	1.9	1.06 - 2	MRDLG = 4	MRDL = 4	ppm	Ν	Water additive used to control microbes
Total Trihalomethanes (TTHM)	2024	1	1.3 - 1.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic	Collection	Highest Level	Range of Levels					
Contaminants	Date	Detected	Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2024	0.152	0.106 - 0.152	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2024	0.54	0.3 - 0.54	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	0.31	0.21 - 0.31	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2024	68800	47600 -68800			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2024	6	4.98 - 6.81	0	5	pCi/L	Y	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2024	17	17.2 - 27	0	15	pCi/L	N	Erosion of natural deposits.

Violations Table

Combined Radium 226/228

Combined Radium 226/226						
Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.						
Violation Begin Violation End Violation Explanation						
			Water samples showed that the amount of this contaminant in our drinking water was above its			
MCL, AVERAGE	10/01/2024	12/31/2024	standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.			
MONITORING, ROUTINE MAJOR	10/01/2024	024 12/31/2024	We failed to test our drinking water for the contaminant and period indicated. Because of			
	10, ROUTINE MAJOR 10/01/2024 12/31/20		this failure, we cannot be sure of the quality of our drinking water during the period indicated.			

Corrective Measures for Combined Radium 226/228:

The Village of Carbon Cliff is in the process of installing a new water main that will connect the Village to the City of East Moline. The project has an anticipated completion date of Fall 2025. The Village is also exploring the option of connecting to the City of Moline's water supply to act as a secondary water supply and backup water supply should there ever be an issue with the water supply from the City of East Moline. Once the project is complete, the Village will terminate the wells within the Village and begin purchasing water from East Moline.

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				
			We failed to provide to you, our drinking water customers, an annual report that adequately				
CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2023	2023	informed you about the quality of our drinking water and the risks from exposure to contaminants				
			detected in our drinking water.				

Corrective Measures for Consumer Confidence Rule:

The Village completed and posted the 2022 Consumer Confidence Report on our village website and mailed it to the residents of Carbon Cliff. However, the copy that was mailed to the EPA was never received. For the 2023 Consumer Confidence Report, the Village sent copies to residents via direct mail and the Illinois EPA by Certified Mail. Residents may view our report on our village website at https://www.carbon-cliff.com/ccr1. For the 2024 Consumer Confidence Report, the Village will send copies to residents via direct mail, the Illinois EPA will be certified mail, and by email. As always, our most current report can be found at https://www.carbon-cliff.com/ccr1. For the 2024 Consumer Confidence Report, the Village will send copies to residents via direct mail, the Illinois EPA will be certified mail, and by email. As always, our most current report can be found at https://www.carbon-cliff.com/ccr1.

Gross alpha, including radon and uranium

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may							
have an increased risk of getting cancer.							
Violation Type Violation Begin Violation End Violation Explanation							
			We failed to test our drinking water for the contaminant and period indicated. Because of this				

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MONITORING, ROUTINE MAJOR	10/01/2024	12/31/2024	We failed to test our drinking water for the contaminant and period indicated. Because of this
HONTONINO, NOOTINE HAJON	10/01/2024	12/31/2024	failure, we cannot be sure of the quality of our drinking water during the period indicated.

Corrective Measures for Gross Alpha, including radon and uranium:

The Village of Carbon Cliff is in the process of installing a new water main that will connect the Village to the City of East Moline. The project has an anticipated completion date of Fall 2025. The Village is also exploring the option of connecting to the City of Moline's water supply to act as a secondary water supply and backup water supply should there ever be an issue with the water supply from the City of East Moline. Once the project is complete, the Village will terminate the wells within the Village and begin purchasing water from East Moline.

Lead and Copper Rule							
The Lead and Copper Rule protects the 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 Explanation				
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2022 08/12/2024	09/12/2024	We failed to test our drinking water for the contaminant and period indicated. Because of this				
FOLLOW-OF OR ROOTINE TAP M/R (LCR)		08/12/2024	failure, we cannot be sure of the quality of our drinking water during the period indicated.				

Corrective Measures for Lead and Copper Rule:

The Village's water operator has submitted and met all Lead and Copper testing requirements.