

Consumer Confidence Report

Annual Drinking Water Quality Report

RED BUD

IL1570450

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 RED BUD is Ground Water

For more information regarding this report contact:

Name Timothy Albers

Phone (618) 979 - 4434

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 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: <ul style="list-style-type: none">- 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
WELL 12 (00318)	GW	<u>Active</u>	(NEW)-5 MI E/TOWN-KAS RVR BRMS
WELL 13 (00718)	GW	<u>Active</u>	5 MI E/TOWN-KASK RIVER BOTTOMS

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 (618) 979 - 4434. 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: RED BUD To determine Red Bud's susceptibility to groundwater contamination the Illinois Rural Water Association conducted a survey in April 1998. During the survey of Red Bud's source water protection area, no potential sources, routes, or possible problem sites were recorded within the 1,000 foot survey radius of wells #12 and #13. The Illinois EPA considers the source water of this facility to be 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 the available hydrogeologic data on the wells.

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
Copper	2022	1.3	1.3	1.4	5	ppm	Y	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2022	0	15	5.3	0	ppb	Y	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.

Water Quality Test Results

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
Chloramines	12/31/2022	2	1.2 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	16	16.2 - 16.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	9	9.24 - 9.24	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	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	09/08/2021	0.087	0.087 - 0.087	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	09/08/2021	0.741	0.741 - 0.741	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Manganese	09/08/2021	11	11 - 11	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2022	1	0.63 - 0.63	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	09/08/2021	66	66 - 66			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.

Violations Table

Lead and Copper Rule			
The Lead and Copper Rule protects 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
OCCT/SOWT RECOMMENDATION/STUDY (LCR)	04/16/2022	06/29/2022	We failed to propose treatment to our regulator in response to results that indicate our water needs treatment to reduce lead and/or copper levels.
WQP LEVEL NON-COMPLIANCE (LCR)	07/01/2022	12/31/2022	Water samples showed that the corrosion control we use failed to consistently control the aggressive nature of our drinking water for the period indicated, thus likely increasing the amount of lead or copper in our drinking water.

Corrective Action

Reviewed and determined the Optimal Corrosion Control Treatment (OCCT) / Strengths, Weaknesses, Opportunities, and Threats (SOWT) Study requirements and deadlines. The City of Red Bud submitted the OCCT/SOWT recommendation/study to IEPA on July 1, 2022 versus the April 15, 2022 deadline.

Reviewed and determined the Water Quality Parameter (WQP) levels, reporting, deadlines, and requirements for the Lead and Copper Rule (LCR). The new WQP will be determined upon the completion of the OCCT/SOWT study.

The City of Red Bud's water system lead and copper levels did not exceed the 90th percentile action levels for the 07/01/2022 - 12/31/2022 monitoring period.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Location Requirements Not Met for Red Bud

Our water system violated a drinking water standard over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not Red Bud’s drinking water meets health standards. During January 1 – January 31, 2023 we monitored the water system for trihalomethanes (THMs) and haloacetic acids (HAAs) which are disinfection by-products (DBPs). The laboratory swapped the THM and HAA sample bottles and attached the wrong address labels to the sample bottles. Therefore, Red Bud collected the required THM sample from the HAA sample site and the HAA sample from the THM sample site. Although, the DBP sample results were well below the action levels of 80 part per billion (ppb) for total THMs at **12.1 ppb** and 60 ppb for total HAAs at **3.79 ppb**, Red Bud did not collect the required samples from the required locations, therefore are required to notify the public of the error. The City of Red Bud uses groundwater (GW) as the source of supply, which GW is very low in organic concentrations. During the disinfection treatment process, if there are high organic concentrations in the source water the potential exists to have high concentrations of DBPs. The DBP concentrations in Red Bud’s drinking water are well below the THM & HAA action levels, as a result the water is safe to use and drink as needed.*

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) properly test for during the last year, how often we are supposed to sample for DBPs once per year, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were or will be taken
THM	once/year in January	3	once/year in January	Resample in June 2023
HAA	once/year in January	3	once/year in January	Resample in June 2023

What happened? What is being done?

The required DBP samples will be resampled and collected from the correct THM and HAA sample locations in June 2023. Going forward, the sample collector will verify the laboratory attached the correct labels to the correct bottles for the required monitoring parameter.

For more information, please contact Patty Rieke at (618) 282 – 3339, patty.rieke@cityofredbud.org, or 525 Power Street Red Bud, IL 62278.

Please share this information with all the 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 by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Red Bud’s water system. Water System ID#: IL1570450 Date distributed: June 23, 2023