

# Annual Drinking Water Quality Report for Calendar Year 2023

Mount Vernon (IL0810300)

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. This report includes drinking water facts, information on violations (if applicable), and contaminants detected in your drinking water supply during calendar year 2023. Each year, we will provide you a new report. If you need help understanding this report or have general questions, please contact the person listed below.

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

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### Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

Our source of water comes from Purchased Surface Water from Rend Lake Inter-City Water System (IL0555100)

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.

### Other Facts about Drinking Water

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 EPA's 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 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 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).

### **Source Water Assessments**

Source water protection (SWP) is a proactive approach to protecting our critical sources of public water supply and assuring that the best source of water is being utilized to serve the public. It involves implementation of pollution prevention practices to protect the water quality in a watershed or wellhead protection area serving a public water supply. Along with treatment, it establishes a multi-barrier approach to assuring clean and safe drinking water to the citizens of Illinois. The Illinois EPA has implemented a source water assessment program (SWAP) to assist with wellhead and watershed protection of public drinking water supplies.

We want our valued customers to be informed about their water quality. If you would like to learn more, please to attend feel welcome 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 618-242-6850. 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: REND LAKE INTER-CITY WATER SYSTEM, Illinois EPA considers all surface water sources of public water supply to susceptible to potential pollution problems. Hence the reason for mandatory treatment of all public 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.

### **Source Water Information**

Source Water Name	Type of Water	Report Status	Location
CCOI - MT. VERNON MASTER METER FF IL0555100 TP02	SW		Northeast corner of County Highway 36 and railroad tracks

### 2020 Regulated Contaminants Detected

The next several tables summarize contaminants detected in your drinking water supply. Since water is purchased from **Rend Lake Inter-City Water System (IL0555100)**, results indicated with an asterisk (\*) were provided to us by them.

Here are a few definitions and scientific terms which will help you understand the information in the contaminant detection tables.

A.T.							
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.						
Avg	Regulatory compliance with some MCLs is based on running annual average of monthly samples.						
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best						
	available treatment technology.						
MCLG	Maximum Contaminant Level Goal: 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.						
MRDL	Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water.						
MRDLG	Maximum Residual Disinfectant Level Goal: The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.						
N/A	Not Applicable						
NTU	Nephelometric Turbidity Units						
pCi/L	picocuries per liter (a measure of radioactivity)						
ppb	Parts per billion or micrograms per liter (ug/L) - or one ounce in 7,350,000 gallons of water.						
ppm	Parts per million or milligrams per liter (mg/L) - or one ounce in 7,350 gallons of water.						
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.						

Colif	orm Bacteria	MCLG	Total Coliform MCL	Highest Number of Positive Samples	Fecal Coliform or <i>E. coli</i> MCL	Total No. of Positive E. coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
	240	0	1 positive monthly sample	1		0	No	Naturall present in the environment

Lead and Copper								
	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2023	1.3	1.3	0.0557	0	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Copper*	2023	1.3	1.3	0.0524	0	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2023	0	15	0.0557	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.
Lead*	2023	0	15	0.0524	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.

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 City of Mount Vernon 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 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Disinfectants & Disinfection	Collection	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
Byproducts	Date	Detected	Detected					
Chloramines*	2023	3.0	2.6 - 3.2	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
Chlorite*	2023	0.54	0.26 - 0.54	0.8	1	ppm	No	By – product of drinking water chlorination.
Haloacetic Acids (HAA5)*	2023	20	11 - 23.5	N/A	60	ppb	No	By – product of drinking water chlorination.
Total Trihalomethanes (TTHM)*	2023	41	22.3 - 56.7	N/A	80	ppb	No	By – product of drinking water chlorination.
Chloramines	2023	3	3 - 3	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	23	13.3 - 20.4	N/A	60	ppb	No	By – product of drinking water chlorination.
Total Trihalomethanes (TTHM)	2023	41	20.7 - 60.3	N/A	80	ppb	No	By – product of drinking water chlorination.
Inorganic Contaminants	Collection	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
	Date	Detected	Detected					
Arsenic*	2023	1.28	1.28 - 1.28	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff
								from glass and electronics production wastes.
Barium*	2023	0.0126	0.0126 -0.0126	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal
								refineries; Erosion of natural deposits.
Fluoride*	2023	0.69	0.69 - 0.69	4	4	ppm	No	Erosion of natural deposits; Water additive which
								promotes strong teeth; Discharge from fertilizer and
								aluminum factories.
Sodium*	2023	20.6	19.3-19.3			ppm	No	Erosion from naturally occurring deposits.
Nitrate (measured as Nirogen)*	2020	0.16	20.6 - 20.6			ppm	No	Runoff from fertilizer use; Leaching from septic tanks,
								sewage; Erosion of natural deposits.
Radiological Contaminants	Collection	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
	Date	Detected	Detected					
Combined Radium 226/228*	1/22/2020	0.86	0.86-0.86	0	5	pCi/L	No	Erosion of naturally occurring deposits
Gross alpha excluding radon and	1/22/2020	0.12	0.12-0.12	0	15	pCi/L	No	Erosion of naturally occurring deposits
uranium*								

Samples collected by Rend Lake\*

Turbidity*	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single Measurement	1NTU	0.29 NTU	No	Soil Runoff
Lowest monthly % meeting limit	0.3 NTU	100%	No	Soil Runoff

### **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, unless a TOC violation is noted in the violation section.

### UCMR5 information can be found at: UCMR5 Data Finder https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule-data-finder#data-finder

### **Violation Summary Table**

The following table(s) lists all violations that occurred during 2023. We included a brief summary of the actions we took following notification of the violation.

Contaminant or Program	Violation Type	Violation Duration	Violation Explanation		
		Start Date – End date			
DBP monitoring	Monitoring, Routine (DBP), Major	04/01/2023 - 06/30/2023	Mt. Vernon water received monitoring violations for failure to sample for Haloacetic Acids		
_	Monitoring, Routine (DBP) Major	10/01/2023 – 12-31-2023	during the monitoring period. These violations were due to laboratory error.		
Health Effects (if	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer				
applicable)		_			
Actions we took:	Mt. Vernon water collected the requi	ired samples on 7-5-2023 and 12-5-23			

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

# Monitoring Requirements Not Met for MT. VERNON

Our water system violated a drinking water standard over the past year. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

On June 27, 2023 we were informed through email from the State lab in Springfield, IL that there was a lab error with our samples that we submitted on May 9, 2023. We submitted a new set of samples as soon as we were informed of the error. Our new samples were processed, and all results were below the regulatory levels for maximum contaminants. The same lab error occurred with our 10/1/2023 – 12/31/2023 HAA samples and we resubmitted the samples.

For more information, please contact Anita Flota at 618-242-6851 or 1201 Casey Ave. Mt. Vernon, IL. 62864.

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 our drinking water meets health standards. During the period of May1,2023 through May31,2023 we did not complete all testing for HAA Disinfection By-Product and therefore cannot be sure of the quality of our drinking water during that time.

### What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for Disinfectant By- Products, 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
HAA5 Dibromoacetic acid Dichloroacetic acid Monochloroacetic acid Monobromoacetic acid Trichloroacetic acid	Quarterly	12	4/1/2023 through June 31, 2023 & 10/1/2023- 12/31/2023///	July 5, 2023 Dec. 5,2023