

City of McLeansboro 2024 Drinking Water Quality Report

	Source of Drinking Water	
<p style="text-align: center;">McLeansboro IL-0650200</p> <p>Annual Water Quality Report for the period of January 1 to December 31, 2023.</p>	<p>The source 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 materials, and can pick up <u>substances resulting from the presence of animals or from human activity.</u></p>	<p><u>Drinking water</u>, including bottles 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.</p>
<p>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.</p> <p>The source of drinking water used by the City of Mcleansboro is Purchased Surface Water.</p> <p>For more information about this report contact:</p> <p>Name: David Harmon @ City Hall Phone: 618-643-2723</p> <p>Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien.</p>	<p>Contaminants that may be present in source water include:</p> <ul style="list-style-type: none"> - <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. - <u>inorganic contaminants</u>, such as salt 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. - <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. - <u>Organic chemical contaminants</u>, 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. - <u>Radioactive contaminants</u>, which can be naturally-occurring or be the result of oil and gas production and mining activities. 	<p>In order to ensure that the 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 bottles water which must provide the same protection for public health.</p> <p>Some people may be more vulnerable to contaminants in drinking water than the general population.</p> <p>Immuno- compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant, 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 provider. 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.</p> <p>If present, elevated levels of lead can cause serious health problems, especially for pregnant woman 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 the 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.</p>

2023 Regulated Contaminants Detected

Lead and Copper Date Sampled: 2023

Definitions: Action Level (AL): 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. ALG's allow for a margin of safety.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	# Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper AL	Likely Source of Contamination
0	15 ppb	0 ppb	0	1.3 ppm	1.3 ppm	0.0524	0	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. **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology. **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. **ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. **ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. **N/A:** not applicable. **Avg.:** Regulatory compliance with some MCL's is based on running annual average of monthly samples. **Maximum Residual Disinfectant Level (MRDL):** The highest level of 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 (MRDLG):** The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants. **pCi/L:** Picocuries per Liter (a measure of radioactivity)

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
<i>*Not all sample results may have been used for calculating the Highest level detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.</i>								
*Total Haloacetic Acids (HAA5)	2023	20	11 - 23.5	N/A	60	ppb	No	By-product of drinking water chlorination
*TTHMs [Total Trihalomethanes]	2023	41	22.3 - 56.7	N/A	80	ppb	No	By-product of drinking water chlorination
Chlorite	2023	0.54	0.26 - 0.54	0.8	1	ppm	No	By-product of drinking water chlorination
Chloramines	2023	3.0	2.6 - 3.2	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Barium	2023	0.0126	0.0126 - 0.0126	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Arsenic	2023	1.28	1.28 - 1.28	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from electronics production wastes

Inorganic Contaminants (continued)	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Fluoride	2023	0.69	0.69 – 0.69	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer or Aluminum Factory discharge
Sodium	2023	20.6	20.6 – 20.6			ppm	No	Erosion from naturally occurring deposits. Used in water softener regeneration

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.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
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 uranium	1/22/2020	0.12	0.12 – 0.12	0	15	pCi/L	No	Erosion of naturally occurring deposits

Turbidity 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 water quality and the effectiveness of our filtration system and disinfectants.

Definitions: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
 NTU – Nephelometric Turbidity Units

Lowest Monthly % meeting limit	Limit (Treatment Technique)	Violation	Source
100%	0.3 NTU	No	Soil Runoff
Highest Single Measurement	Limit (Treatment Technique)	Violation	Source
0.39	1 NTU	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, unless a TOC violation is noted in the violation sections.

VIOLATIONS: Rend Lake Intercity Water received a monitoring violation for failure to sample for Haloacetic Acids during the 11/1 – 11/30/23 monitoring period. This violation was due to laboratory error. RLIW collected the required sample on 12/6/23.

MCLEANSBORO

IL0650200

Source Water Name	Type of Water	Report Status	Location
CC01 - MCLEANSBORO MASTER METER	FF IL0555100 TP02 - IN	_____	_717 W. Main Street

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 618-924-1102. **Like last year, this report will be available via web link in our Newsletter.** 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.

Coliform bacteria

Maximum Contaminant Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or Coli Max Contaminant Level	Total No. of positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of contam.
0	0	0		0	N	

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	09/16/2021	1.3	1.3	0.041	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/16/2021	0	15	1	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.

Action Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's 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.

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	2023	2.6	2 - 2.3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	20	18.1 - 22	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	39	24.6 - 49.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

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 do not goal or MRDLG:

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs 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.

Violation Table

Haloacetic Acids (HAA5)			
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Monitoring, Routine (DBP), Major	04/01/2023	06/30/2023	We failed to test our drinking water for the contaminant and period indicated. Because Of this failure, we cannot be sure of the quality of our drinking water during the period Indicated.

Total Trihalomethanes (TTHM)			
Some People who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explained
Monitoring, Routine (DBP), Major	01/01/2023	03/31/2023	We failed to test our drinking water for the contaminant and period indicated. Because Of this failure, we cannot be sure of the quality of our drinking water during the period Indicated.
Monitoring, Routine (DBP), Major	04/01/2023	06/30/2023	We failed to test our drinking water for the contaminant and period indicated. Because Of this failure, we cannot be sure of the quality of our drinking water during the period Indicated.

Corrective Measure:
We have since taken the required samples, as described in the table above. The results showed that we are meeting drinking water standards.