

MURPHYSBORO - Annual Drinking Water Quality Report IL0770500

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 Murphysboro is purchased surface water from Kinkaid Area Water System.

For more information regarding this report, please contact Tim Lee, Water Maintenance Foreman, at (618) 684-2961 ext 324.

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 materials, and can pick up substances resulting from the presence of animals or from 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 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 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 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 person 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.

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 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 by contacting Tim Lee, Water Maintenance Foreman, at (618) 684-2961 ext 324. Information on lead in drinking water, testing methods and step 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
CC01 - MURPHYSBORO MASTER METER	FF IL0775100 TP02	SW	<u>Current</u>	AT 1.0 MG GRD STORAGE TANK, 0.1 miles north of the intersection of Illinois Ave. & Stave Mill Rd.
CC03 - MURPHYSBORO MASTER METER	FF IL0775100 TP02	SW	<u>Current</u>	Northeast of the intersection of 16th Street and High School Street, at the High School
CC04 - MURPHYSBORO MASTER METER	FF IL0775100 TP02	SW	<u>Current</u>	Southeast of the intersection of 7th Street and Suburban Drive
CC05 - MURPHYSBORO MASTER METER	FF IL0775100 TP02	SW	<u>Current</u>	North of the intersection of Highway 13 and Sounth Hospital Drive, at St. Joseph's Hospital
CC07 - MURPHYSBORO MASTER METER	FF IL0775100 TP02	SW	<u>Current</u>	Located at the intersection of Savanna Drive and Cedar Drive

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) 684-2961. 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: KINKAID AREA 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.

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: 9.8 ug/l to 370 ug/l
Lead Range: <1.0 ug/l to 16 ug/l

To obtain a copy of the system's lead tap sampling data: Tim Lee - (618) 684-2961

CIRCLE ONE: Our Community Water Supply has/has not developed a service line material inventory.

To obtain a copy of the system's service line inventory: Tim Lee - (618) 684-2961

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/22/2023	1.3	1.3	0.23	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	09/22/2023	0	15	3.3	1	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.

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.

Water Quality Test Results

Maximum residual disinfectant level goal or MRDLG:
na:
mrem:
ppb:
ppm:
Treatment Technique or TT:

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.
not applicable.
millirems per year (a measure of radiation absorbed by the body)
micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
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	2024	3	2.6 - 3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2024	26	12.3 - 43	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	15	4.6 - 28.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Annual Drinking Water Report

Kinkaid Area Water System

IL0775100

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The source of drinking water use by Kinkaid Area Water System is surface water.

For more information regarding this report contact:

Name J.T. Jenkins

Phone 618-687-2951

Source Water Information

Source Water Name	Type of Water	Report Status	Location
Intake (70620) KINKAID LAKE	SW	<u>Current</u>	<u>Jackson County</u>

Source Water Assessment

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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	2024	3.4	3.2 - 3.5	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Chlorite	2024	0.87	0.74 - 0.87	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2024	12	12.1 - 12.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	10	10.1 - 10.1	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
Fluoride	2024	0.8	0.78 - 0.78	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	0.16	0.16 - 0.16	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2024	13	13.2 - 13.2			ppb	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2,4-D	2024	0.3	0.3 - 0.3	10	10	ppb	N	Runoff from herbicide used on row crops.
Atrazine	2024	0.2	0.1 - 0.2	3	3	ppb	N	Runoff from herbicide used on row crops.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination

MAXT

Highest single measurement	1 NTU	0.22 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	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 water 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.