Water Quality Report for METROPOLIS (IL1270150)

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 METROPOLIS is Ground Water. For more information regarding this report contact J.K. Thomas at 618-524-3445.

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

This report will not be mailed, but copies are available upon request at City Hall, 106 West 5th Street, Metropolis, IL 62960 or by going to our website:

metropolisil.gov (scroll down to Quick Links and click on Water Quality Report)

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:

- *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 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 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 (800-426-4791) or at *epa.gov/safewater/lead*.

Source Water Information

Source Water Name	Type of Water	Status	Location
Well 6 (01251)	Ground Water (GW)	Active	City Limits (specific location available upon request)
Well 7 (01252)	Ground Water (GW)	Active	City Limits (specific location available upon request)
Well 8 (01253)	Ground Water (GW)	Active	City Limits (specific location available upon request)

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 call our Water Superintendent at 618-524-3445. 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 *dataservices.epa.illinois.gov/swap/factsheet.aspx*.

To determine Metropolis' susceptibility to groundwater contamination, the Illinois Rural Water Association conducted a well site survey in December 2002. Based on the information obtained in this document, there are 17 potential sources of groundwater contamination that could pose a hazard to groundwater utilized by Metropolis' community water supply. These include 1 auto repair shop, 1 paint store, 1 waste landfill, 1 animal feed and supplies store, 1 railroad storage area, 1 salvage yard, 1 fertilizer warehouse, 1 waste water treatment facility, 1 below ground fuel storage tank, 1 above ground fuel storage tank, 2 lumber yards, 2 manufacturing processes, and 3 hardware stores. In addition, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated sites with on-going remediation that might be of concern. Based upon this information, the Illinois EPA has determined that the Metropolis Community Water Supply's source is not susceptible to contamination. The Illinois EPA is in the process of delineating 5-year recharge areas for Metropolis' wells. The land use within the minimum and maximum protection zones of the wells was analyzed as part of this susceptibility determination. This land use includes residential and commercial properties.

Water Quality Test Results

Abbreviations and Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal (ALG) is the level of contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Average (Avg): Regulatory compliance with some MCL's is based on running annual average of monthly samples.

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 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 (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) is 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.

Maximum Residual Disinfectant Level (MRDL) is 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 (MRDLG) is the level of a drinking water disinfectant below which there is a no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Parts Per Billion (ppb) is one part by weight of analyte to 1 billion parts by weight of the water sample (or one ounce in 7,350,000 gallons of water).

Parts Per Million (ppm) is one part by weight of analyte to 1 million parts by weight of the water sample (or one ounce in 7,350 gallons of water).

Picocuries Per Liter (pCi/L) is a measure of radioactivity in water.

Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.

2022 Regulated Contaminants Detected

Coliform Bacteria	Collection Date	MCLG	Total Coliform MCL	Highest No. of Positive	Fecal Coliform or E. Coli MCL	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
Total Coliform	August 2022	0	1 positive monthly sample	1		0	No	Naturally present in environment.
Lead and Copper	**Collection Date**	**MCLG**	**Action Level (AL)**	**90th Percentile**	**# Sites Over AL**	**Units**	**Violation**	**Likely Source of Contamination**
Copper	August 2020	1300	1300	57	0	ppb	No	Erosion of natural deposits; Corrosion of household plumbing systems; Leaching from wood preservatives.
Lead	August 2020	0	15	<1.0	0	ppb	No	Erosion of natural deposits; Corrosion of household plumbing systems.
Disinfectants & Disinfection By-Products	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contaminant**
Chlorine (monthly)	2022	2.07	1.40 - 2.07	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	July 2022	7.52	7.52 - 7.52	No goal for the total	80	ppb	No	By-product of drinking water chlorination.
Inorganic Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contaminant**
Barium	July 2020	0.029	0.029 - 0.029	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	July 2020	0.68	0.68 - 0.68	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	February 2022	0.12	0.12 - 0.12	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	July 2020	4.1	4.1 - 4.1	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	July 2020	10.0	10.0 - 10.0	na	na	ppm	No	Erosion from naturally occurring deposits; Used in water softener regeneration.
Zinc	July 2020	0.006	0.006 - 0.006	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.
Radioactive Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contaminant**
Combined Radium 226 / 228	January 2021	1.22	1.22 - 1.22	0	5	pCi/L	No	Erosion of natural deposits.

NOTE: Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred. The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.