

Annual Water Quality Report for the period of January 1 to December 31, 2009

METROPOLIS - IL 1270150

This report is intended to provide you with important information about your drinking water and the efforts made by the METROPOLIS water system to provide safe drinking water. **This report will not be mailed, but copies are available at City Hall, 106 West 5th Street, Metropolis, IL 62960.** The source of drinking water used by METROPOLIS is Ground Water. If you have any questions about this report or concerning your water system, please contact: J.K. Thomas (618) 524-3445. 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 at City Hall on the second and fourth Monday of each month at 7:00P.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúscalo 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 pickup 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 (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 EPA's 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. METROPOLIS 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 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 <http://www.epa.gov/safewater/lead>.

Our system uses groundwater provided by three wells drilled into the Mississippian aquifer. An aquifer is a geological formation that contains water. All three wells are located within the city limits.

<u>Source Water Name</u>	<u>Type of Water</u>	<u>Report Status</u>	<u>Location</u>
Well 6 (01251)	GW	Active	City Limits
Well 7 (01252)	GW	Active	City Limits
Well 8 (01253)	GW	Active	City Limits

Source Water Assessment

The Illinois EPA has completed the source water assessment for our supply. If you would like a copy of this information, please stop by City Hall or call our water operator 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 <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

A Source Water Assessment Summary is included below for your convenience.

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. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Metropolis' wells. These minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to the source water, a maximum protection zone may be established, which is authorized by the Illinois Environmental Protection Act and allows county and municipal officials the opportunity to provide additional potential source prohibitions up to 1,000 feet from their wells. To further minimize the risk to the city's groundwater supply, the Illinois EPA recommends the following to be considered. First, the water supply staff may wish to conduct contingency planning. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a community will minimize their risk of being without safe or adequate water. Second, the water supply staff is encouraged to conduct biennial cross connection survey of the distribution system as outlined in the cross connection control ordinance [Section 18 of the Environmental Protection Act 415 ILCS 5/1 et seq. (Act); 35 Illinois Act Code, Sections 607.104d, 653.801c] and to review their cross connection control ordinance to ensure that it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives. Finally, the Illinois EPA recommends that the city investigate additional source water protection management options to address the land use activities within the wells' recharge area. To further reduce the risk to source water, Metropolis may wish to implement a wellhead protection program, which includes the proper abandonment of potential routes of groundwater contamination within the wellhead protection area and correction of any sanitary defects that might be present at the water treatment facility. This effort may result in the community water supply receiving a special exception permit from the Illinois EPA, which allows a reduction in monitoring and laboratory analysis costs.

2009 Regulated Contaminants Detected

Lead and Copper	Collection Date	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	September 2008	1.3	1.3	0.077	0	ppm	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	September 2008	0	15	2	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Chlorine	2009 (Monthly)	1.03	0.76 - 1.03	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes
Total Trihalomethanes (TThm) *	7/13/2009	7.1	7.1 - 7.1	N/A	80	ppb	No	By-product of drinking water disinfection

* 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.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Barium	9/8/2008	0.031	0.031 - 0.031	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2009 (Monthly)	1.02	0.96 - 1.02	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	9/8/2008	0.032	0.032 - 0.032	N/A	1.0	ppm	No	Erosion from naturally-occurring deposits
Manganese	9/8/2008	0.007	0.007 - 0.007	N/A	0.15	ppm	No	Erosion from naturally-occurring deposits
Nitrate (measured as Nitrogen)	2/4/2009	0.066	0.066 - 0.066	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	9/8/2008	0.002	0.002 - 0.002	0.05	0.05	ppm	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium **	9/8/2008	7.9	7.9 - 7.9	N/A	N/A	ppm	No	Erosion from naturally-occurring deposits: Used in water softener regeneration.
Zinc	9/8/2008	0.062	0.062 - 0.062	N/A	5	ppm	No	Erosion from naturally-occurring deposits

** Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Combined Radium (226 / 228)	2/4/2009	1.5	1.5 - 1.5	0	5	pCi/L	No	Erosion of natural deposits
Gross Alpha	2/4/2009	1.55	1.55 - 1.55	0	15	pCi/L	No	Erosion of natural deposits of certain materials that are radioactive and may emit a form of radiation known as alpha radiation.

NOTE: Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the calendar year referenced in this report. 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.

Definitions/Abbreviations

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.

Maximum Contaminant Level (MCL): 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.

Action Level (AL): The concentration of a contaminant that triggers treatment or other required actions by the water supply.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

ppm: parts per million, or milligrams per liter (mg/L)

ppb: parts per billion, or micrograms per liter (ug/L)

pCi/L: picocuries per liter (a measure of radioactivity)

N/A: Not Applicable