



Annual Drinking Water Quality Report

Source of Drink Water

EFFINGHAM

IL0490250

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

This report is intended to provide you with important information about your drinking water and the efforts made by the EFFINGHAM water system to provide safe drinking water. The source of drinking water used by EFFINGHAM is Surface Water.

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

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 USEPA'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 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>.

Source Water Assessment

Source Water Name	Type of Water	Report Status	Location
INTAKE (01459) LITTLE WABASH	SW	_____	_____
INTAKE (01460) LAKE SARA	SW	_____	_____
INTAKE (01895) HOLLAND ENERGY	SW	_____	_____
INTAKE (45170) CIPS LAKE PUMP	SW	_____	_____

Source Water Information

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 [217-347-5056](tel:217-347-5056). 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>.

Drinking water for the City of Effingham, Illinois (Facility NO. 0490250) is supplied by the Effingham Community Water Supply (CWS). CIPS Lake serves as the primary source of this drinking water and Lake Sara as a secondary source. Water is obtained from one surface water intake in each Lake (IEPA #01460 and #45170, respectively). In addition, an intake is maintained on The Little Wabash River (IEPS #10459) which can pump to CIPS Lake or directly to the water treatment plant. As of Dec. 13, 2007 The City of Effingham is capable of obtaining water from the Kaskaskia River as a third source of water supply. Average water pumped is 2.3 million gallons per day to approximately 7,088 service connections and an estimate population of 18,065 people. Connected facilities that purchase water from Effingham includes Snake Trail PWD (0495350), Lake Sara Co-op (0495150), and Heartville PWD (0495200). Two facilities, EJ Water Corp. (0790010) and Teutopolis (0490450) purchase a portion of their water from Effingham. Maps and tables are not available in the Visually Impaired Accessible version. However, the information presented in the maps and tables is summarized within the text sections of this fact sheet.

Illinois EPA considers all surface water sources of public water supply to be 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.

Based on information obtained in a Well Site Survey, published in 1990 by the Illinois EPA, two potential secondary sources are located 950 and 1,100 feet from Well #1, and 1,100 and 800 feet from Well #3. Information provided by the Leaking Underground Storage Tank and Site Remediation Program Sections of Illinois EPA did not indicate any additional sites with on-going remediations. However, this information has not been field verified by the Groundwater Section staff and additional sites may or may not be located in proximity to the village's source water protection area. The Illinois EPA has determined that the Gifford Community Water Supply's source water has a low susceptibility to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data for the wells. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Gifford Community Water Supply has a low susceptibility to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; there is a hydrogeologic barrier that restricts pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat to the source water. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this groundwater supply.

2009 Regulated Contaminants Detected

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.

— 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 are responsible for providing high quality drinking water, but 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 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>. —

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2008	1.3	1.3	0.043	0	Ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Water Quality Test Results

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 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 residual disinfectant level goal or MRDLG: 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.

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.

Definitions:

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

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

na: not applicable.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Regulated Contaminants.

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Chloramines	2009	3.9	1.5 - 3.9	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes	Edit
Chlorine	2009	3.9	3.9 - 3.9	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes	Edit
Haloacetic Acids (HAA5)	2009	34	4.7 - 59	No goal for the total	60	ppb	No	By-product of drinking water chlorination	Edit
Total Trihalomethanes (TTHM)	2009	57	39 - 102	No goal for the total	80	ppb	No	By-product of drinking water chlorination	Edit
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Barium	2009	0.017	.017 - .017	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	Edit
Fluoride	2009	1.2	1.2 - 1.2	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer and Aluminum Factory discharge	Edit
Nitrate (Measured As Nitrogen)	2009	0.3	0.3 - 0.3	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Edit
Sodium	2009	17	17 - 17			ppm	No	Erosion from naturally occurring deposits; Used in water softener regeneration	

Note: 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.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Combined Radium 226/228	2008	.9	.9 - .9	0	5	Pci/L	N	Erosion of natural deposits.	
Gross alpha excluding radon and uranium	2008	3	.3 - .3	0	15	Pci/L	N	Erosion of natural deposits.	
Synthetic Organic Contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Simazine	2009	1	0 - 0.74	4	4	Ppb	N	Herbicide Runoff	

Turbidity

Limit (Treatment Technique)	Lowest Monthly % meeting limit	Violation	Source	
0.3 NTU	100	No	Soil Runoff	Edit
Limit (Treatment Technique)	Highest Single Measurement	Violation	Source	
1 NTU	0.21 NTU	No	Soil Runoff	Edit

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 by IEPA, unless a TOC violation is noted in the violations section.