



City of Lockport- Annual Drinking Water Quality Report

LOCKPORT

IL1970500

Annual Water Quality Report for the period of January 1 to December 31, 2010

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

Source of Drinking Water
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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).

Source Water Information

The water supply for Lockport is a ground water source drawn from 9 shallow wells.

Source Water Assessment

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

The Illinois EPA does not consider the city's source water susceptible 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 on the wells. In anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the water supply is not vulnerable to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic barrier exists that should prevent 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 a sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should minimize the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the vulnerability determination. Hence, well hydraulics were not evaluated for this groundwater supply.

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. 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 (815) 838-0549 ext 2303. 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>.

2010 Regulated Contaminants Detected

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. ALG's allow for a margin of safety.

---- 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	7/11/08	1.3	1.3	0.6794	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	7/11/08	0	15	9.1	0	ppb	No	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 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 Maximum Contaminant Level Goal as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant 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.

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.

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

na: Not applicable.

Average (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
Chlorine		0.5	0.4433 – 0.6212	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)		1	1.1 - 1.1	No goal for the total	60	ppb	No	By-product of drinking water chlorination.
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.								
Total Trihalomethanes (TTHMs)		8	8 – 8	No goal for the total	80	ppb	No	By-product of drinking water chlorination.
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		0.022	0.016 – 0.022	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride		1	0.84 – 1	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron		0.046	0 – 0.046		1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese		7	6 – 7	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate (measured as Nitrogen)		1	0 – 0.97	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium		2	1 – 2	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium		38	37 – 38			ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration.
Zinc		0.022	0.007 – 0.022	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
Uranium	4/11/2005	2.682	2.682 – 2.682	0	30	ug/l	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium		3	0 - 0	0	15	pCi/L	No	Erosion of natural deposits.
Combined Radium 226/228		1	0 – 0.559	0	5	pCi/L	No	Erosion of natural deposits.
Beta/photon emitters	02/04/2009	4.2	4.2 - 4.2	0	4	mrem/yr	No	Decay of natural and man-made deposits.

Notes: 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. 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.

2010 Violations Table:

The following table lists all the violations that occurred in 2010:

Violation Type	Violation Begin	Violation End	Violation Explanation
Groundwater Rule – Illinois Section	1/15/10	ongoing	Failure to provide an assuredly safe source of raw water. The presence of total coliform has been confirmed in raw water samples from Well 2 (WL00991), Well 5 (WL22135) and Well 8 (WL01325). Note that total coliform is not present in the distribution system.