

# Annual Drinking Water Quality Report

## Lockport Township Water System

IL 1978100

Annual Water Quality Report

For the period of January 1 to December 31, 2021

This report is intended to provide you with important information about your drinking water and the efforts made by the Lockport Township Water System / City of Joliet to provide safe drinking water. The source of drinking water used by the Lockport Township Water System is Ground Water (well water).

This year, as in years past, your tap water was tested according to USEPA and state drinking water health standards. Our system vigilantly safeguards its groundwater supply, and we are working hard to continue providing the best water possible. This report summarizes the quality of water that we provided last year and informs you of the problems if any we are working to overcome. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

For more information regarding this report, contact: Allison Swisher P.E., Director of Public Utilities, City of Joliet.

Este informe contiene información muy importante. 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 natural-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 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 that 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 and 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**

We want our valued customers to be informed about their water quality. The source water assessment of our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or contact Allison Swisher at 815-724-4230. 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-factsheets.pl>

To determine the Lockport Township Water System susceptibility to groundwater contamination, information defined during a well site survey performed by the Illinois Rural Water Association was reviewed. Based on this information, the Illinois EPA does not consider the source water from Well #1 to be susceptible to contamination, however the Illinois EPA considers the source water from Well #2 to be 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.

## Water Quality Test Result

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

**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 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.

**mg/l:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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

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

**ug/l:** 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.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The highest level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

**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.

**Mrem:** millirems per year. (a measure of radiation absorbed by the body)

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminate in drinking water.

## 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>.

## Coliform Bacteria

Regulated Contaminants / Date Collected	Total Coliform Maximum Contaminate	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	MCLG	Total No. of Positive E. Coli or Fecal Coliform Samples	Violations	Likely Source of Contamination
Total Coliform	1 monthly sample	1		0	0	No	Naturally present in the environment.

## Lead and Copper

Lead and Copper Date Collected 2021	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violations	Likely Source of Contamination
Copper 2021	1.3	1.3	2.23	6	ppm	YES	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead 2021	0	15	2.03	1	ppb	YES	Corrosion of household plumbing systems; Erosion of natural deposits

## Radioactive Contaminants

Regulated Contaminants / Date Collected	Highest Level Detected	Range of Levels Detected	Units	MCLG	MCL	Violations	Likely Source of Contamination
Gross Alpha excluding radon and uranium 1/10/2017	3	2.1-3	pCi/L	0	15	No	Erosion of natural deposits
Combined Radium 226/228 1/10/2017	1.2	.9 - 1.2	pCi/L	0	5	No	Erosion of natural deposits.

### Disinfectants & Disinfection By-Products

Disinfection & Disinfection By-Products / Date Collected	Highest Level Detected	Range of Levels Detected	Units of Measurement	MCLG	MCL	Violations	Likely Source of Contamination
Chlorine Date collected 2021	0.8	0.53 - 1.3	ppm	MRDLG 4	MRDL 4	No	Water additive used to control microbes
Haloacetic Acids (HAA5)* Date collected 2021	3	2.72- 2.72	ppb	No goal for the total	60	No	By-product of drinking water chlorination
Total Trihalomethnaes Date collected 2021	11	10.5 – 10.5	ppb	No goal for total	80	No	By-product of drinking water chlorination

### Inorganic Contaminants

Regulated Contaminants / Date Collected 2020 or as noted	Highest Level Detected	Range of Levels Detected	Units of Measurement	MCLG	MCL	Violations	Likely Source of Contamination
Arsenic Date collected 2020	.932	0.533 - .932	ppb	0	10	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production waste.
Barium Date collected 2020	0.0651	0.0331 - 0.0651	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride Date collected 2020	.45	.34 – .45	ppm	4	4.0	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
Iron Date collected 2020	.391	.122 - .391	ppm	NA	1.0	No	Erosion from naturally occurring deposits
Manganese Date collected 2020	32.9	0 - 32.9	ppb	150	150	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion natural deposits

Sodium Date collected 2020	33.2	24.9 – 33.2	ppm	NA	NA	No	Erosion of naturally occurring deposits; used in water softener regeneration
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## Violations Table

<b>Lead and Copper Rule</b>			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and Copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
OCCT/SOWT Recommendation/ Study (LCR)	10/16/2021	2021	We failed to propose treatment to our regulator in response to results that indicate our water needs treatment to reduce lead and/or copper.

**Corrective Action:** The City of Joliet proposed to switch sources to help minimize corrosion. The Illinois Environmental Protection Agency subsequently approved the plan.

<b>Public Notification Rule</b>			
The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water. (e.g. a boil water emergency)			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
Public Notice Rule Linked to Violation	11/26/2021	12/04/2021	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

**Corrective Action:** A letter dated 12-4-21 was sent to all residents describing the violation and corrective actions.

For more information, please contact the City of Joliet, Department of Public Utilities at (815) 724-4220

