

# Consumer Confidence Report

## Annual Drinking Water Quality Report

E J WATER COOP

IL0790010

Annual Water Quality Report for the period of January 1 to December 31, 2017

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

E J WATER COOP 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.

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: <ul style="list-style-type: none"><li>- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</li><li>- 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.</li><li>- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.</li><li>- 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.</li><li>- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.</li></ul>

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 EPAs 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 Information

Source Water Name	Type of Water	Report Status	Location
CC 04 - HARDENVILLE INTERCONNECTION	GW	_____	_____
CC06 - CONN TO SOUTH LAWRENCE WATER	GW	_____	_____
INTAKE (01895) HOLLAND ENERGY	SW	_____	_____
INTAKE (01952) RESERVOIR INTAKE KASKASKIA RIVER	SW	_____	_____
WELL 1 (00807) IS W WELL OF 2 ON W SIDE	GW	_____	_____
WELL 11 (01123)	GW	_____	IS SOUTH OF 2 ON ROAD
WELL 12 (01237)	GW	_____	IS 120 FT N OF WELL #11
WELL 13 (01353)	GW	_____	IS 600 FT EAST OF WELL 11
WELL 14 (01354)	GW	_____	IS 300 FT N OF WELL 13
WELL 2 (00808)	GW	_____	IS E WELL OF 2 ON W SIDE OF EMB R
WELL 20 (02005)	GW	_____	_____
WELL 21 (02006)	GW	_____	_____
WELL 22 (02007)	GW	_____	_____
WELL 4 (01764)	GW	_____	NW 1/4 SECT 34, CROOKED CREEK TWNSP. JASPER CO. 08N , 09E, SECT. 34
WELL 5 (01843) WATER WELL #5	GW	_____	NW 1/4, SEC. 34 CROOKED CREEK TOWNSHIP, JASPER COUNTY, IL

## 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 stop by City Hall or call our water operator at 217-925-5566. 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>.

Source of Water: E J WATER COOP To determine E J Water Corporation's susceptibility to groundwater contamination, the Illinois EPA reviewed a Well Site Survey, published in 1996 by the Illinois EPA, a Source Water Protection Management Plan, prepared by the facility's planning committee and published in 1997, and a survey of the south well field performed in 2005. Based on the above documents, the community water supply's source water is susceptible to IOC and SOC contamination from non-point sources related to agricultural land use, although no presence of any pesticides/herbicides were detected in any water samples thus far analyzed. As a result of monitoring conducted at the wells and entry point to the distribution system, the land use activities, and source water protection initiatives by the facility, the E J Water Corporation's groundwater source is not susceptible to VOC contamination. However, 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. Source of Water: HARDINVILLE WATER COMPANY To determine Hardinville Water Company's susceptibility to groundwater contamination, the 2007 survey was reviewed. No potential sources, routes, or possible problem sites exist within the 400 foot minimum setback zones, 1,000 foot maximum setback zone, or the 5-year recharge area. No sites are located within either setback zone or recharge area. The Illinois EPA considers the source water of this facility to be susceptible to SOC 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, the available hydrogeologic data on the wells, and the land-use activities in the recharge area of the wells. Source of Water: ST. FRANCISVILLE To determine St. Francisville's susceptibility to groundwater contamination, the source water protection areas were surveyed by the Illinois Rural Water Association in 2002. During this survey, no potential sources, routes, or possible problem sites were located within the 400 foot minimum setback zone of wells #6, #7 and #8. Additionally, no potential sources or problem sites were located within the potential 1,000 foot maximum setback zone of the wells. Furthermore, no potential sources, routes, or possible problem sites were encountered within St. Francisville's recharge areas. The Illinois EPA has determined that St. Francisville's wells #6, #7 and #8 are susceptible to SOC 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.

**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.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.48	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	7.4	2	ppb	N	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.

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

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.

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 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 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.

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.

na: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

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

## Water Quality Test Results

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

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

**Regulated Contaminants**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2017	1.8	1 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Chlorite	2017	0.98	0.59 - 0.98	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2017	17	0 - 32.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	18	12.51 - 22.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.0035	0.0019 - 0.0035	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	0.6	0.499 - 0.59	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	1	0.18 - 0.62	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2017	11	11 - 15			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Zinc	2017	0.0099	0 - 0.0099	5	5	ppm	N	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 Contamination
Combined Radium 226/228	04/13/2015	1.061	0.416 - 1.061	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	01/19/2015	2.95	2.95 - 2.95	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

Atrazine	2017	0.32	0 - 0.32	3	3	ppb	N	Runoff from herbicide used on row crops.
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**Turbidity**

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.299 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

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

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 Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/21/2015	1.3	1.3	0.163	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

**Water Quality Test Results**

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Chlorine	12/31/2017	1.1	1 - 1.2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2017	7	6.7 - 6.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	17	16.5 - 16.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	04/07/2015	0.0207	0.0207 - 0.0207	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	04/07/2015	1.07	1.07 - 1.07	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	1	0.731 - 0.731	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	04/07/2015	9.92	9.92 - 9.92			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	07/11/2012	0.3	0.3 - 0.3	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	07/11/2012	0.46	0.46 - 0.46	0	15	pCi/L	N	Erosion of natural deposits.