2019 ANNUAL DRINKING WATER REPORT

Channahon East 1970070
Customers east of I-55 (Joliet supplied)
For the period of January 1, 2018 to December 31, 2018

Why Read This Report?

Because it contains important information about your drinking water and the joint efforts of the Village of Channahon and City of Joliet to provide safe drinking water to your home. The source of your drinking water is groundwater purchased from the City of Joliet.

Pump, Test, and Then What?

The City of Joliet draws its groundwater from 21 deep (bedrock) wells (pumping water from 1,000 feet below the surface) and 5 shallow (gravel) wells (pumping water from 80 feet below the surface) drilled into aquifers located throughout the city. An aquifer is simply a geological formation that contains water. After the raw water is pumped and tested for bacteria, it is treated with a blended ortho-polyphospate, which is added for corrosion control, and sodium hypochlorite is added for disinfection. Eleven water treatment plants have been constructed to remove naturally occurring radium from the water supply. Deep wells contain natural fluoride.

IEPA Source Water Assessment

The Safe Drinking Water Act has established the criteria for determining the vulnerability of a source water to potential sources of contamination. The tool used to apply these criteria is the source water assessment. The City of Joliet's source water assessment was prepared by the Illinois EPA and is summarized as follows: "The Illinois EPA considers the gravel wells of this facility to be susceptible to Synthetic Organic Contaminant contamination and does not consider the bedrock wells to be susceptible to Inorganic Contaminant, Synthetic Organic Contaminant or Volatile Organic Contaminant 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

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Questions? Concerns?

About this report or your water system, contact:
Ed Dolezal, Director of Public Works
815-467-6644 or email:
edolezal@channahon.org

Watering Restriction

Help us conserve this precious natural resource. Please be aware that sprinkling of lawns is limited to even-numbered days for even street addresses and odd-numbered days for odd addresses. Tickets will be issued for violations.

Installing a Water Softener?

You need to know the following...
Water hardness:
15 grains per gallon

Inside...

Water quality data tables—know what's in your water.

Village of Channahon
where the waters meet

IEPA Source Water Assessment continued...

available hydrogeologic data on the wells, and the land-use activities in the recharge area of the wells." Additional information on Joliet water supply's source water assessment is available from the Channahon Public Works Department at 815-467-6644.

General Information About Drinking Water

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 United States Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline (1-800-426-4791).

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water (both tap 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 can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity. Possible contaminants consist of:

- 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 may be naturally occurring or result from urban stormwater 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 stormwater runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems; and
- Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA prescribes regulations that 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.

The water quality tables on the following pages contain the results of the Village of Channahon and City of Joliet's routine testing for the above contaminants, for the above contaminants, if any were found. All sample results fall within the established limits.

The following tables identify the contaminants that were detected in the water supply. The Village of Channahon collected the data in the tables for lead/copper and the City of Joliet collected the remainder of the data. The Village of Channahon also conducts Coliform Bacteria monitoring and Total Haloacetic Acids and Trihalomethanes testing. In addition to the following contaminants that were detected in the water supply, over 100 other contaminants were tested for and were NOT DETECTED in the water supply.

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. MCLGs allow for a margin of safety.

Maximum Contaminant Level (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 (MRDL): The highest level of drinking water 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 (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.

Action Level (AL): 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.

DISINFECTANTS & DISINFECTION BY-PRODUCTS

Results meet or surpass state and federal drinking water regulations

	Amounts Detected		EPA Standards			
Substance Detected (units)	**Highest Level Detected**	**Range of Detections**	**MCL**	**MCLG**	**Violation**	**Typical Source of Contamination**
Chloramines (ppm)	2.1	1.01 – 2.53	MRDL=4	MRDLG=4	NO	Water additive used to control microbes.

ppm–parts per million, or milligrams per liter (mg/l) – or one ounce in 7,350 gallons of water. *Running Annual Average

INORGANIC CHEMICALS

Inorganic Chemicals (IOCs) include salts, metals, minerals and nutrients which can be naturally occurring or which can result from stormwater runoff, wastewater discharges, or farm activities. Because our source of drinking water is groundwater, a significant amount of naturally occurring minerals are dissolved in the water.

Results meet or surpass state and federal drinking water regulations

	Amounts Detected		EPA Standards			
Substance Detected (units)	**Highest Level Detected**	**Range of Detections**	**MCL**	**MCLG**	**Violation**	**Typical Source of Contamination**
Barium (ppm)	0.0335	0.0142 - 0.0335	2	2	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	1.34	0.681 – 1.34	4	4	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
Manganese (ppb)	16.6	0 – 16.6	150	150	NO	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits

ppm–parts per million, or milligrams per liter (mg/l) – or one ounce in 7,350 gallons of water.

RADIONUCLIDES

Radionuclides are man-made or natural elements that emit radiation. A picocurie per liter (pCi/l) is a unit of radioactivity. A curie is the amount of radioactivity in a gram of radium. A picocurie is one trillionth of a curie.

	Amounts Detected		EPA Standards			
Substance Detected (units)	**Highest Level Detected**	**Range of Detections**	**MCL**	**MCLG**	**Violation**	**Typical Source of Contamination**
Gross Alpha excluding radon & uranium (pCi/l)	13	2.1 – 13.3	15	0	NO	Erosion of natural deposits
Combined radium 226/228 (pCi/l)	4	1.33 – 3.6	5	0	NO	Erosion of natural deposits

pCi/l-picocuries per liter (a measure of radioactivity). **ppb**–parts per billion, or micrograms per liter (µg/l) – or one ounce in 7,350,000 gallons of water.

LEAD AND COPPER

Results for Lead and Copper sampled in 2016

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	# Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper AL	Violation	Typical Source of Contamination
0	15 ppb	<5 ppb	0	1.3 ppm	1.3 ppm	0.874 ppm	0	NO	Corrosion of household plumbing systems; Erosion of natural deposits

ppm–parts per million, or milligrams per liter (mg/l) – or one ounce in 7,350 gallons of water. **ppb**–parts per billion, or micrograms per liter (ug/l) – or one ounce in 7,350,000 gallons of water.

Note: Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the Consumer Confidence Report calendar year. 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.

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. The Channahon Public Water Supply 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 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.

STATE REGULATED CONTAMINANTS

In addition to enforcing the Safe Drinking Water Act, the Illinois EPA enforces state regulations.

	Amounts Detected		EPA Standards			
Substance Detected (units)	Highest Level Detected	Range of Detections	MCL	MCLG	Violation	Typical Source of Contamination
Sodium (ppm) There is not a state or federal MCL for sodium. 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 about this level of sodium in the water.	79.7	48.4 – 79.7	N/A	N/A	NO	Erosion of naturally occurring deposits; Used in water softener regeneration

N/A-not applicable. **ppm**–parts per million, or milligrams per liter (mg/l) – or one ounce in 7,350 gallons of water.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

Unregulated Contaminate Monitoring Rule

The 1996 amendments to the Safe Drinking Water Act (SDWA) require that once every five years, the U.S. Enviromental Protection Agency (EPA) issue a new list of no more than 30 unregulated contaminates to be monitored by public water systems (PWS). The Unregulated Contaminate Monitoring Rule (UCMR) provides EPA and other interested parties with scientifically valid data on the occurrence of contaminates in drinking water. This national survey is one of the primary sources of information on occurrence and labels of exposure that the Agency uses to developed regulatory decisions for contaminates in the public drinking water supply. For more information you can go to the UCMR home page https://www.epa.gov/dwucmr

Unregulated Contaminates	Highest Level Detected	Range of Levels Detected	MRL	Units	Likely Source of Contamination
Germanium	0.412	0.327-0.412	0.3	ug/l	naturally occurring element;commercially available in combination with other elements and minerals a byproduct of zinc ore processing; used in infared optics fiber-optic system, electronics and solar applications
Manganese	99.5	.07-99.5	0.4	ug/l	naturally occurring element;commercially available in combination with other elements and minerals used in steel production, fertilizer, batteries & fireworks drinking water wastewater treatment chemical; essential nutrient