

# Annual Drinking Water Quality Report for Calendar Year 2023 Princeton, IL (IL0110850)

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. This report includes drinking water facts, information on violations (if applicable), and contaminants detected in your drinking water supply during calendar year <u>2023</u>. Each year, we will provide you a new report. If you need help understanding this report or have general questions, please contact the person listed below.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien. Contact Name: John Eggers, Water Department - Chief Operator Telephone Number: (815) 872-0811 Email: john.eggers@princeton-il.com

#### Sources 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.

Our source of water comes from ground water, located in the Sankoty aquifer, from four wells located near the water treatment plant.

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.

#### **Other Facts 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 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 Assessments

Source water protection (SWP) is a proactive approach to protecting our critical sources of public water supply and assuring that the best source of water is being utilized to serve the public. It involves implementation of pollution prevention practices to protect the water quality in a watershed or wellhead protection area serving a public water supply. Along with treatment, it establishes a multi-barrier approach to assuring clean and safe drinking water to the citizens of Illinois. The Illinois EPA has implemented a source water assessment program (SWAP) to assist with wellhead and watershed protection of public drinking water supplies.

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. They are held the first and third Mondays of each month at 7:00 pm at Princeton City Hall. The source water assessment for our supply is completed by the Illinois EPA. If you would like a copy of this CCR information, please stop by the Water Plant or call our water operator at 815-872-0811. To view an up to date summary of the 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 <a href="http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl">http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl</a>.

The Princeton Community Water Supply collects source water from four wells in a confined aquifer. The Illinois EPA has determined that the Princeton Community Water Supply's source water is not 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 available hydrogeological data on the wells. Please access the Illinois EPA website at <a href="http://dataservices.epa.illinois.gov/swap/factsheet.aspx">http://dataservices.epa.illinois.gov/swap/factsheet.aspx</a> for the most up to date Source Water Protection Assessment.

## 2023 Regulated Contaminants Detected

The next several tables summarize contaminants detected in your drinking water supply.

Here are a few definitions and scientific terms which will help you understand the information in the contaminant detection tables.

- AL Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ALG Action Level Goal: The level of contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.
- Avg Regulatory compliance with some MCLs is based on running annual average of monthly samples.
- MCL Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.
- MCLG Maximum Contaminant Level Goal: 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.
- MRDL Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water.
- MRDLG Maximum Residual Disinfectant Level Goal: The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety. N/A Not Applicable
  - NTU Nephelometric Turbidity Units
  - **pCi/L** picocuries per liter ( a measure of radioactivity)
  - **ppb** Parts per billion or micrograms per liter (ug/L) or one ounce in 7,350,000 gallons of water.
  - **ppm** Parts per million or milligrams per liter (mg/L) or one ounce in 7,350 gallons of water.
  - TT Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

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 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)

Lead and C	Lead and Copper								
	Date Sampled	MCLG	Action Level	90 <sup>th</sup>	# Sites Over	Units	Violation	Likely Source of Contamination	
			(AL)	Percentile	AL				
Copper	2023	1.3	1.3	0.059	1	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead	2023	0	15	9.8	3	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.	

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 Princeton 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.

Disinfectants & Disinfection Byproducts	Collection Date	Highest Level Detected	Range of L Detecte		MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	3.2	2-4		MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2023	11	10.74 - 10.74		No goal for the total.	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	24	24-24		No goal for the total.	80	ppb	No	By-product of drinking water disinfection.
Inorganic Contaminants									
Arsenic	2023	4.8	4.8-4.	.8	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2023	0.0039	0.0039 - 0.0	.0039	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2023	0.618	0.618 – 0.	.618	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (Measured as Nitrogen)	2023	0.09	0.09 – 0.	.09	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Chromium	2020	4.2	4.2-4.	.2	100	100	ppb	No	Discharge from steel & pulp mills; Erosion of natural deposits.
Radiological Contaminants									
Combined Radium 226/228	2015	1.25	1.25 - 1.2	.25	0	5	pCi/L	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2015	1.96	1.96 - 1.9	.96	0	15	pCi/L	No	Erosion of natural deposits.
State Regulated Contaminants									
Sodium	2023	51	51 - 51	1	None	None	ppb	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.

- Due to favorable monitoring history, aquifer characteristics, and inventory of potential sources of contamination, our water supply was issued a vulnerability waiver renewal. No monitoring for SOCs, VOCs and Cyanide is required.

- While drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenics possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

#### Violation Summary Table

We are happy to announce that no monitoring, reporting, treatment technique, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2023.

Violation Type	Violation Begin	Violation End	Violation Explanation
None	NA	NA	NA