

Consumer Confidence Report

Annual Drinking Water Quality Report

MAPLETON

111430500

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 MAPLETON is Purchased Ground Water

for more information regarding this report contact:

Name REGINA

Phone 712, C. 9, \$

Este informe contiene informaci6n muy importantesobre el agua que usted bebe. Traduzcalo 6 hable con alguien que lo entienda bien

Source of Drinking Water	
<p>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.</p>	<p>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.</p>
<p>Contaminants that may be present in source water include:</p> <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 operation, and wildlife.</li> </ul>	<p>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.</p>
<ul style="list-style-type: none"> <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> </ul>	<p>Some people may be more vulnerable to contaminants in drinking water than the general population</p>
<ul style="list-style-type: none"> <li>Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.</li> </ul>	<p>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).</p>
<ul style="list-style-type: none"> <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> </ul>	<p>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 <a href="http://www.epa.gov/lead">http://www.epa.gov/lead</a></p>
<ul style="list-style-type: none"> <li>Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities</li> </ul>	

## 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 the City of Peoria 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 317-241-1111. 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/water/swap-fact-sheets.pl>.

Source of Water: ILLINOIS PEORIA ILLINOIS EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Within the Upper Illinois River Watershed, which is illustrated in Figure 1, many commodities, including manufactured goods, petrochemicals, and pesticides are transported along the river system. The production, storage, and transportation of these commodities are a major concern, especially when occurring near surface water intakes. In addition, agricultural runoff within the Upper Illinois River Basin contributes to the susceptibility of the IAWC-Peoria intakes. With high flow rates and long distances of travel on the Illinois River, critical areas can be extensive. The critical area for the IAWC-Peoria intake was determined using data from a joint U. S. EPA/U. S. Geological Survey project. This project used a computer modeling program (SPARROW) to determine travel times on major rivers in the United States. Figure 1 shows the critical area of concern for the IAWC-Peoria intakes and potential sources of contamination within the watershed. Accidental spills of hazardous materials into navigable waterways are a major concern because of their frequency in the United States in recent years. Illinois has access to 1,116 miles of inland waterway that can handle commercial barge traffic. These include the Upper Mississippi River, Illinois River Waterway, and the Ohio River. Along these waterways are numerous facilities that load and unload hazardous materials. Analysis of reported spills indicate that between 1974 and 1989, 794 accidental spills of hazardous materials occurred along Illinois waterways. Approximately 45 percent of these spills occurred along the Illinois River, including a fertilizer spill in 1988 that resulted in IAWC-Peoria closing its intake on the river for several days. Figure 1 shows the critical area of concern (Zone 1) for the IAWC-Peoria surface water intake. Spills occurring in this critical area will travel to the intake in five hours or less, making contingency planning and spill reporting a major concern in this watershed. The Five-Year Recharge Areas for the IAWC water supply wells were delineated by Illinois State University under a program funded by Illinois EPA. Figures 2, 2A, 2B and 2C show the five-Year Recharge Areas for the IAWC-Peoria water supply wells. These figures also show the known potential sources of contamination that may have releases of contaminants of concern to groundwater. Due to the unconfined nature of the wells and the proximity of potential sources of contamination at the Dodge Street and San Koty wellfields, and a history of low level VOC/VOA detections at the Dodge Street and Reserve wellfields, Illinois EPA considers these wells to be susceptible to contamination. The Griswold wellfield has no history of detections and has few potential sources of contamination. The implementation of the groundwater protection management efforts described below will assist in reducing the susceptibility of these wellfields.

2017 Regulated Contaminants Detected

**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

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	2.2	2	ppm	y	Erosion of natural deposits; Leaching from wood preservative; Corrosion of household plumbing systems
Lead	2017	0	15	2.7	1	ppb	y	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
Chloramines	12/31/2017	2.3	1.6-2.8	MRDLG - 4	MRDL • 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	08/11/2015	2.84	2.84-2.84	No goal for the total	80	ppb	N	By-product of drinking water disinfection

Violations Table

**Lead and Copper Rule**

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

Violation Type	Violation Begin	Violation End	Violation Explanation
OCCT/SO1'/T RECOMMENDATION/STUDY (LCR)	04/01/2017	07/18/2017	We failed to propose treatment to our regulator in response to results that indicate our water needs treatment to reduce lead and/or copper levels.

**Public Notification Rule**

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).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	05/05/2017	06/02/2017	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations

Village Engineer sent a detailed plan to the IEPA of the steps that would be taken if adding orthophosphate to our water was required.