

Consumer Confidence Report

Annual Drinking Water Quality Report

MAPLETON

IL1430500

Annual Water Quality Report for the period of January 1 to December 31, 2018

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:

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Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o 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>Contaminants that may be present in source water include:</p> <ul style="list-style-type: none">- 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.	<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>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> <p>Some people may be more vulnerable to contaminants in drinking water than the general population.</p> <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.</p> <p>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> <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 http://www.epa.gov/safewater/lead.</p>

Source Water Information

Source Water Name
CC 02-MASTER METER

FF ILL1430030 TP02

Type of Water

GW

Report Status

Location

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 309-572-6675. 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: IL AMERICAN-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.

2018 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.
 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	2018	1.3	1.3	1.3	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2018	0	15	2.6	0	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
Chloramines	12/31/2018	2.4	1.3 - 2.8	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	2018	2.75	2.75 - 2.75	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Violations Table

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2018	10/04/2018	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.

Illinois American Water Peoria District
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Peoria, IL 61614
PWSID IL1435030



Source Water Information

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. Water for the Peoria District comes from both groundwater and surface water. Four major sources supply water to the distribution system — the Illinois River and three well sites. The Illinois River is subject to a variety of influences including municipal, agricultural, and some industrial activities. Farm chemicals may be seasonally elevated in the river. Extensive monitoring and treatment ensure high-quality water regardless of variations in the source water. Water from this facility serves central Peoria.

The well sites draw groundwater from the San Koty Aquifer. An aquifer is a porous underground formation (such as sand and gravel) that is saturated with water. Generally, the northern and southern portions of our service area receive groundwater. The permeable nature of the geology makes these wells vulnerable to contamination. All spills should be reported to Illinois Environmental Protection Agency (EPA) and Illinois American Water.

The IEPA has completed a source water assessment for this system and a copy is available. A copy is available upon request by calling Pamela Ingersoll-Goede, Water Quality Supervisor at 309-566-4164. 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/cgl-bin/wp/swap-fact-sheets.pl>



The Partnership for Safe Water

Illinois American Water's Peoria District is a volunteer participant in the USEPA's Partnership For Safe Water, a National program designed to achieve operational excellence in water treatment.

In 2016 Illinois American Water's Peoria District was awarded the prestigious "Fifteen-Year Director's Award" under the Partnership for Safe Water program administered by the USEPA and other water related organizations. The award honors water utilities for achieving operational excellence, by voluntarily optimizing their treatment facility operations and adopting more stringent performance goals than those required by federal and state drinking water standards. We are proud to report that we have maintained those standards throughout 2018. Only a small percentage of facilities in the United States have received the Fifteen-Year Partnership Award.

2018 Water Quality Information

We are pleased to report that during the past year, the water delivered to your home or business complied with, or was better than, all state and federal drinking water requirements. For your information, we have compiled a table showing what substances were detected in your drinking water during 2018. Although all of the substances listed are under the Maximum Contaminant Level (MCL) set by the U.S. Environmental Protection Agency, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. If you have questions about the data please contact us.

that at least 95% of routine samples are less than or equal to 0.3 NTU, and no sample exceeds 1 NTU. We are reporting the percentage of all readings meeting the standard of 0.3 NTU, plus the single highest reading for the year.

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 violation section

Unregulated Contaminant Monitoring Rule (UCMR4)⁶

Contaminant (units)	Year Sampled	Amount Detected (Average)	Range of Detections	Typical Source
Germanium (ppb)	2018	0.1	ND-0.3	Naturally-occurring element, commercially available in combination with other elements and minerals; a byproduct of zinc ore processing; used in infrared optics, fiber-optic systems, electronics and solar applications
Manganese (ppb)	2018	1.02	ND-1.1	Naturally-occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient
Total Haloacetic Acids 9 - UCMR4 (ug/L)	2018	18	5.9 - 24	By-product of drinking water disinfection.
Total Microcystins (ug/L)	2018	0.707	ND - 3.5	Algal toxins are toxic substances released by some types of algae (phytoplankton) when they are present in large quantities (blooms) and decay or degrade. High nutrient levels and warm temperatures often result in favorable conditions for algae blooms.

⁶ Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that 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. ALGs allow for a margin of safety.

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

Compliance Achieved: Indicates that the levels found were all within the allowable levels as determined by the USEPA

Highest Level Detected In most cases this column is the highest detected level unless compliance is calculated on a Running Annual Average or Locational Running Annual Average. If multiple entry points exist, the data from the entry point with the highest value is reported.

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

Table Definitions and Abbreviations