2019 Dunlap's Annual Drinking Water Quality Report

DUNLAP

IL1430250

Annual Water Quality Report for the period of January 1 to December 31, 2019

This report is intended to provide you with important information about your drinking water and the efforts made by the DUNLAP water system to provide safe drinking water. The source of drinking water used by DUNLAP is Purchase Water from Illinois American. Their report is attached.

For more information regarding this report contact:

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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 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 pickup substances resulting from the presence of animals or from human activity.

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.

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).

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 http://epa.gov/safewater/lead.

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 309-243-7500 . 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.** 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 indicates 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 well fields, and a history of low level VOC/VOA detections at the Dodge Street and Reserve well fields, Illinois EPA considers these wells to be susceptible to contamination. The Griswold well field 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 well fields.

2019 Dunlap's Regulated Contaminants Detected

Lead and Copper

Date Sampled: 2019

Definitions:

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.
---- 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 are responsible for providing high quality drinking water, but 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.----

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2019	1.3	1.3	0.82	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2019	0	15	5.1	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. Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology. Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.mg/l: milligrams per litre or parts per million - or one ounce in 7,350 gallons of water.ug/l: micrograms per litre or parts per billion - or one ounce in 7,350,000 gallons of water.na: not applicable.Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
CHLOROMINE	2019	1.4	1.3 - 1.4	4	4	PPM	No	Water additive used to control microbes
Total Haloacetic Acids (HAA5)	2019	9	2.47-17.2	N/A	60	ppb	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes]	2019	21	11.3-22.6	N/A	80	ppb	No	By-product of drinking water chlorination

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

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.

Our Parent Supply – Illinois American Water Peoria District's Information:

Illinois American Water Peoria District (PWSID IL1435030)
123 S. W. Washington Street
Peoria, IL 61602

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 ground water. The permeable nature of the geology makes these wells vulnerable to contamination. All spills should be reported to Illinois Environmental Protection Agency (IEPA) 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 assessment, 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

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 2017 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 facilities 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 2017. Only a small percentage of facilities in the United States have received the Fifteen-year Partnership Award

Cryptosporidium

Cryptosporidium is a protozoan found in untreated surface waters throughout the United States (the organism is generally not present in a ground water source). Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, people with severely weakened immune systems have a risk of developing life-threatening illness. We encourage such people to consult their doctors regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it is spread through means other than drinking water.

USEPA issued a new rule in 2006 that requires systems with higher *Cryptosporidium* levels in their source water to provide additional treatment. In 2017, our monitoring of the Illinois River raw untreated water indicated the presence of this organism. The Illinois River cryptosporidium levels ranged from not detected to 0.182 oocysts/L, with an average of 0.044 oocysts/L. Although this organism is present, it is at levels low enough that no supplemental treatment is required by our facility per USEPA standards. USEPA issued a new rule in 2006 that requires systems with higher *Cryptosporidium* levels in their source water to provide additional treatment. Our monitoring of our source water (Illinois River) indicates the presence of this organism, but it is at levels low enough that no supplemental treatment is required by USEPA.

2017 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 2017. 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.

How to Read This Table

Illinois American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2017, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting these tables, see the "Table Definitions" section and footnotes.

Regulated Substances Detected (Measured in the water leaving the treatment facility)

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Atrazine (ppb)	2019	3	3	0.6	ND – 0.7	Yes	Runoff from use as an herbicide on row crops or an insecticide
Barium (ppm)	2019	2	2	1	ND – 0.5	**Yes**	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/photon emitters (pCi/l) [1]	2014	0	50	5	4 – 5	**Yes**	Decay of natural and man-made deposits
Combined Radium 226/228 (pCi/L)	2016	0	5	1.98	ND – 1.98	**Yes**	Erosion of natural deposits
Fluoride (ppm) [3]	2019	4	4	0.8	0.7-0.81	**Yes**	Water additive that promotes strong teeth
Nitrate (ppm) [3]	2019	10	10	5	ND-5.08	**Yes**	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium[6] (ppm)	2019	NA	NA	38	34.8-90.8	**Yes**	Erosion of naturally occurring deposits; Used in water softener regeneration

Turbidity [5]– (Measured in water leaving the treatment facility)

Substance (Units)	Year Sampled	Limit (Treatment technique)	Level Detected	Compliance Achieved	Typical Source
Lowest Monthly % Meeting Limit	2017	0.3 NTU	100%	**Yes**	Soil runoff
Highest Single Measurement	2017	1 NTU	0.15	**Yes**	Soil runoff

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all the TOC removal requirements set, unless a TOC violation is noted in the violation section.

Footnotes

[1]The MCL for Beta/photon emitters is written as 4 millirem/year (measure of rate of radioactive decay). EPA considers 50 pCi/L as the level of concern for beta emitters.

[2]Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends a fluoride level of 0.7 mg/L.

[3]Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

[4]There is no 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.

[5]Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of the effectiveness of our filtration system, water quality, and disinfectants. The treatment technique requires 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.

Table Definitions and Abbreviations

Amount Detected: In most cases this column is the highest detected level unless compliances 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.

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

MCL (Maximum Contaminant Level): 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.

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.

Range of Detections: The range of individual sample results, from lowest to highest, that were collected during the sample period.

ppb - Parts per billion: One part substance per billion parts water or micrograms per liter (ug/L).

ppm - Parts per million: One part substances per million parts water or milligrams per liter(mg/L).

pCi/L - Picocuries per liter: Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

N/A: not applicable.

ND: not detected.

NTU - Nephelometric Turbidity Units: Measurement of the clarity, or turbidity, of water.