# Annual Drinking Water Quality Report

DUQUOIN	Source of Drinking Water	Drinking water, including bottled water, may reasonably be expected to contain at least small
IL1450100	The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water	amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about
Annual Water Quality Report for the period of January 1 to December 31, 2019	travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can	contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.
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.	pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water	In order to ensure that tap water is safe to
The source of drinking water used by	include: Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment	drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish
DUQUOIN is Purchased Surface Water	plants, septic systems, agricultural livestock operations, and wildlife.	limits for contaminants in bottled water which must provide the same protection for public health.
For more information regarding this report contact:	- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or	Some people may be more vulnerable to contaminants in drinking water than the general population.
Name Chris Lacy, Superintendent	domestic wastewater discharges, oil and gas production, mining, or farming.	Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS
Phone (618)542-3841	<ul> <li>Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.</li> </ul>	or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about
Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.	<ul> <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>	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).
	- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.	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.

### Source Water Information

Source Water Name		Type of Water	Report Status	Location
CC04 - DUQUOIN MASTER METER	FF IL0555100 TP02	SW		AT REND LAKE PS DUQUOIN PUMP STA

#### 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 618) 542-3841. 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: REND LAKE INTER-CITY WATER SYSTEM Illinois EPA considers all surface water sources of public water supply to susceptible to potential pollution problems. Hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

### 2019 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.

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ACTION Level:	The concentration of	a contaminant which.	IT exceeded.	Tridders Treatment	or other requirements	which a water	SVSTEM MUST TOLLOW.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/25/2017	1.3	1.3	0.047	0	mqq	Ν	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/25/2017	0	15	1.5	0	dđđ	Ν	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	2019	3.3	3.2 - 3.3	MRDLG = 4	MRDL = 4	mqq	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2019	29	16.4 - 39.8	No goal for the total	60	dqq	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2019	53	27.4 - 65	No goal for the total	80	dqq	N	By-product of drinking water disinfection.

			2019 Table of I	Regulated C	ontaminar	nts	Provide the state of the state	i des sectos contratos da	
Disinfectants & Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	- 2	ikely Source Of Contaminant
A second	v have been	used for calcula where	ating the Highe compliance sa	st level dete mpling shou	ected beca Ild occur i	ause so n the f	ome resul future.	ts may be p	art of an evaluation to determine
*Total Haloacetic Acids (HAA5)	2019	21	16 - 24.8	⇒ <b>N/A</b>	60	ppb	No	By-prod	luct of drinking water chlorination
*TTHMs [Total Trihalomethanes]	2019	44	32.7 - 54.7	N/A	80	ppb	No	By-proc	luct of drinking water chlorination
Chlorite	2019	0.46	0.1 - 0.46	.8	1	ppm	No	By~proc	luct of drinking water chlorination
Chloramines	2019	3	2.8 - 3.2	MRDLG=4	MRDL=4	ppm	No	Water a	additive used to control microbes
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Ζ.	kely Source Of Contaminant
Barium	2019	0.0152	0.0152 - 0.0152	2	2	ppm	No		e of drilling wastes; Discharge from ineries; Erosion of natural deposits
Arsenic	2019	1	0.85 - 0.85	0	10	ppb	No		of natural deposits; Runoff from Runoff from electronics production wastes
Inorganic Contaminants (continued)	Collection Date	Highest Level Detected	Range of Levels Defect <del>e</del> d	MCLG	MCL	Units	Violation	L	ikely Source Of Contaminant
Fluoride	2019	0.6	0.58 - 0.58	4	4	ppm	No	which pr	of natural deposits; Water additive omotes strong teeth; Fertilizer or luminum Factory discharge
Sodium	2019	18	17.5 - 17.5			ppm	No	Erosion	from naturally occurring deposits:
Nitrate (measured as Nitrogen)	2019	0.13	0.13 - 0.13	10	10	ppm	No		n fertilizer use; Leaching from septic wage; Erosion of natural deposits.
The state requires us to monitor fo though accurate, is more than one		itaminants less the	an once per year	because the c	concentrati	ons of t	hese conta	minants do n	ot change frequently. Some of our data,
Radioactive Contamina	ints	Collection Date	Highest Lev Detected	SIGNATION SERVICES FOR THE	of Levels tected	MCLO	MCL Uni	s Violation	Likely Source Of Contaminant
Combined Radium 226/228	<u>n kang sebahan sebahan kun kun kun kun kun kun kun kun kun ku</u>	01-16-2014	0.26	0.26	5 - 0.26	0	5 pCi/	L No	Erosion of naturally occurring deposits;

Turbidity Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Definitions: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. NTU - Nephelometric Turbidity Units

Lowest Monthly % meeting-limit	Limit (Freatment Technique)	Violation	Source
100%	0.3 NTU	No	Soil Runoff
Highest Single-Measurement	Limit (Treatment Technique)	Violation	Source
0.3	1 NTU	No	Soil Runoff
Total Organic Carbon The percentage of Tota requirements	l al Organic Carbon (TOC) removal was measured s set, unless a TOC violation is noted in the viola	each month and ation sections.	the system met all TOC removal
VIOLATIONS: There were no violations this re	porting period.		

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## **Annual Drinking Water Quality Report**

### REND LAKE INTER-CITY WATER SYSTEM

### IL0555100

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 REND LAKE INTER-CITY WATER SYSTEM to provide safe drinking water.

The source of drinking water used by REND LAKE INTER-CITY WATER SYSTEM is Surface Water. For more information regarding this report contact:

Name: Tony Furlow

Phone: 618-439-4394

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 naturallyoccurring minerals and, in some cases, radioactive material, and can pick up 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 may 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, USEPA 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. Immunocompromised 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 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 at http://www.epa.gov/safewater/lead

### Source Water Assessment

Rend Lake is utilized by the Rend Lake Intercity Water System (Facility # 0555100) to provide water to 67 communities in Williamson, White, Saline, Perry, Jefferson, Jackson, Hamilton and Franklin Counties. This facility draws water from Rend Lake through one surface water intake (IEPA #70290). The supply provides approximately 15 million gallons per day to 67 satellite supplies with an estimated population of 167,000 persons. Illinois EPA considers all surface water sources of public water supply to be susceptible to potential pollution problems, hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion. Our surface supply location is INTAKE (70290) REND LAKE SURFACE. 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. These meetings are on the 4<sup>th</sup> Monday of each month at our administration office located at 11231 Marcum Branch Rd., Benton, IL. The source water assessment for our supply has been completed by the Illinois EPA. If you would like 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

### 2019 Regulated Contaminants Detected Lead and Copper Date Sampled: 11/15/19

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.

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	Likely Source of Contamination
0	15 ppb	0 ppb	0	1.3 ppm	1.3 ppm	0	0	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. **ppm**: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. **ppb**: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. **N/A**: not applicable. **Avg.**: Regulatory compliance with some MCL's is based on running annual average of monthly samples. **Maximum Residual Disinfectant Level** (MRDL): The highest level of 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 disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants. **pCi/L:** Picocuries per Liter (a measure of radioactivity)

			Regulat	ed Contami	nants				
Disinfectants & Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
*Not all sample results mag	*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.								
*Total Haloacetic Acids (HAA5)	2019	21	16 - 24.8	N/A	60	ppb	No	By-product of drinking water chlorination	
<i>*TTHMs [Total Trihalomethanes]</i>	2019	44	32.7 - 54.7	N/A	80	ppb	No	By-product of drinking water chlorination	
Chlorite	2019	0.46	0.1 - 0.46	.8	1	ppm	No	By-product of drinking water chlorination	
Chloramines	2019	3	2.8 - 3.2	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes	
Inorganic Contaminants	<i>Collection</i> <i>Date</i>	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant	
Barium	2019	0.0152	0.0152 - 0.0152	2	2	ppm	No	<i>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits</i>	
Arsenic	2019	1	0.85 - 0.85	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from electronics production wastes	

Inorganic Contaminants (continued)	<i>Collection</i> <i>Date</i>	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Fluoride	2019	0.6	0.58 - 0.58	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer or Aluminum Factory discharge
Sodium	2019	18	17.5 - 17.5			ppm	No	Erosion from naturally occurring deposits:
Nitrate (measured as Nitrogen)20190.130.13 - 0.131010ppmNoRunoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.								

though accurate, is more than one year old.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Combined Radium 226/228	01-16-2014	0.26	0.26 - 0.26	0	5	pCi/L	No	Erosion of naturally occurring deposits;

Turbidity Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Definitions: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. NTU – Nephelometric Turbidity Units

Lowest Monthly % meeting limit	Limit (Treatment Technique)	Violation	Source				
100%	0.3 NTU	No	Soil Runoff				
Highest Single Measurement	Limit (Treatment Technique)	Violation	Source				
0.3	1 NTU	No	Soil Runoff				
<b>Total Organic Carbon</b> 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 sections.							
VIOLATIONS: There were no violations this reporting period.							