Annual Drinking Water Quality Report

BLOOMINGTON TOWNSHIP PWD WEST PHASE

IL1130040

Annual Water Quality Report for the period of January $1\ \mathrm{to}$ 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 BLOOMINGTON TOWNSHIP PWD WEST PHASE is Purchased Surface Water

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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 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.

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 broduction, 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 EPAs 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 at http://www.epa.gov/safewater/lead.

Source Water In:	formation
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Source Water Name

Type of Water

Report Status Location

CC 01-MASTER METER

FF IL1130200 TM02

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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 309-823-0333. 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: BLOOMINGTONIllinois 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.

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.
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.

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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	1.9 - 2	MRDLG = 4	MRDL = 4	тдд	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2018	21	21.3 - 21.3	No goal for the total	60	ppb	И	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	31	31 - 31	No goal for the total	80	ddd	N	By-product of drinking water disinfection.

Violations Table

Chloramines										
Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.										
Violation Type	Violation Begin	Violation End	Violation Explanation							
MONITORING, ROUTINE (DBP), MAJOR	04/01/2018	06/30/2018	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.							

Revised Total Coliform Rule (RTCR)

The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches,

Violation Type	Violation Begin	Violation End	Violation Explanation				
MONITORING, ROUTINE, MINOR (RTCR)	RING, ROUTINE, MINOR (RTCR) 06/01/2018 06/30/2018		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.				

2018 - Regulated Contaminants Detected

-Definition of Terms-

<u>Highest Level Detected</u>: In most cases, the "Highest Level Detected" is the annual average of all sample results for the calendar year. It may represent a single sample, if only one sample was collected. For contaminants monitored quarterly, a quarterly average is calculated using all routine/confirmation samples collected during the quarter and the highest quarterly average for the year is reported under Highest Level Detected.

<u>Maximum Contaminant Level (MCL)</u>: 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 technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which is no known or expected risk to health. MCLGs allow for a margin of safety.

N/A: Not applicable

NTU (Nephelometric Turbidity Units): Unit of turbidity (cloudiness caused by suspended particles) measurement.

pCi/L (picoCuries per Liter): Measurement of the natural rate of disintegration of radioactive contaminants in water.

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

Range of Detections: This column represents a range, from highest to lowest, of individual sample results that were collected during the Consumer Confidence Report calendar year. It may represent a single measurement if only one sample was collected.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Year Sampled: Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.

2018 Detected Regulated Contaminants

Inorganic Contaminants

inorganic Con	Year				Highest Level	Range of		Y 1 G Contamination
Contaminant	Sampled	Units	MCLG	MCL	Detected	Detections	Violation	Likely Source of Contamination
Arsenic	2018	ppb	0	10	1.1	Single measurement	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2018	ppm	2	2	0.018	Single measurement	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2018	ppm	4	4.0	0.83	0.48-0.83	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron	2018	ppm	N/A	1.0	0.011	Single measurement	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2018	ppm	10	10	(highest quarterly average) 2	0.07-5.7	N	Erosion from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Sodium	2018	ppm	N/A	N/A	13	Single measurement	N	Erosion from naturally occurring deposits; Used in water softener regeneration.

Synthetic Organic Contaminants Including Pesticides and Herbicides

Dynamene Organic Continuations Including I esticates and 12ci viewes											
	Year				Highest Level	Range of					
Contaminant	Sampled	Units	MCLG	MCL	Detected	Detections	Violation	Likely Source of Contamination			
Atrazine	2018	ppm	3	3	1.1	0.38-1.1	N	Runoff from herbicide used on row crops			

Radioactive Contaminants

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Contaminant	Year Sampled	Units	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Likely Source of Contamination			
Combined Radium 226/228	2013	pCi/L	0	5	1.075	Single measurement	N	Erosion of natural deposits			
Gross alpha excluding radon and uranium	2013	pCi/L	0	15	0.941	Single measurement	N	Erosion of natural deposits			

Turbidity

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	Year Sampled	Limit (TT)	Level Detected	Violation	Likely Source of Contamination	
Highest single measurement	2018	1 NTU	0.28 NTU	N	Soil runoff	
Lowest monthly % meeting limit	2018	0.3 NTU	100%	N	Soil runoff	

Information statement: Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six 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 for advice from your health care provider.

Information statement: Sodium

There is not a 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.

Information Statement: Turbidity

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. Compliance is achieved when 95% or more of the routine turbidity measurements of the water leaving the Bloomington Water Treatment Plant are less than 0.3 ntu.

Bloomington 2018 document for purchase supplies

Summary of Total Organic Carbon monitoring:

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 violations section.

Unregulated Contaminants - add the following footnote:

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language been set. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

2018 Detected Unregulated Contaminants

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	Year					Range of De	Range of Detections					
Contaminant	Sampled	Units	MCLG	MCL	Highest Level Detected			Violation				
	2018	ppb	Not established	Not established	0.718	(None Detect	ted-0.718)	N				
Manganese	Likely Source of Contamination: Naturally-occurring element; commercially available in combination with other elements ar											
	minerals;	minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential										
	nutrient											

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