

VILLAGE OF GERMANTOWN – 2021 Annual Drinking Water Quality Report

Source of Drinking Water
GERMANTOWN IL0270350

Annual Water Quality Report for the period of January 1 to December 31, 2021

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 GERMANTOWN is Purchased Surface Water

For more information regarding this report contact: Name STEVE MULLINS Phone 618-523-4291

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

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 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 IV/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 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. Village Board meetings are held at the Germantown Village Hall on the third Tuesday of each month at 7:00pm at the Village Hall, 306 Prairie St, Germantown, IL. 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 the Village Hall or call our water operator, Steve Mullins at 618-523-4291. 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 Water Information

Source Water Name	Type of Water	Report Status	Location
CC 02-WATER PURCHASED FROM BREESE FF IL0270250 TP01	SW	_____	_____
WELL 2 (60086) 100 FT W/NW CORNER	GW	_____	_____
WELL 3 (60087) 230 FT W/NW CORNER	GW	_____	_____
WELL 4 (60088) 250 FT W OF WEST ST S OF	GW	_____	_____
WELL 5 (01755) WELL 5 AND WATER MAIN	GW	_____	_____

Source of Water: GERMANTOWN Illinois. The Illinois EPA considers Germantown’s source water to be susceptible to IOC, VOC, and SOC contamination. This determination was made primarily based on the identification of potential sources and routes of contamination, land-use activities around the wells, available hydrogeological data, and monitoring results. Material reviewed included the Well Site Survey Report, published in 1989. During the surveys of the source water protection area, eight potential sources, routes, or possible problem sites were identified within the 400 foot minimum setback zones, the 1,000 foot Phase I Wellhead Protection Areas (WHPA), and the Phase II WHPA. Two additional sites are outside of the Phase II WHPA. Source of Water: BREESE 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. In addition, agricultural runoff within the Middle Kaskaskia River Basin contributes to the susceptibility of the Breese intakes.

**GERMANTOWN
2021 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 & Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violations	Likely Source of Contamination
Copper	2021	1.3	1.3	0.395	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Water Quality Test Results

Definitions:

Avg:

Level 1 Assessment:

Level 2 Assessment:

Maximum Contaminant Level or MCL:

Maximum Contaminant Level Goal or MCLG:

Maximum residual disinfectant level or MRDL:

The following tables contain scientific terms and measures, some of which may require explanation

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

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.

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.

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.

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.

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 MRDL: The level of a drinking water disinfectant below which there is no know or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

na: not applicable.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

mrem: millirems per year (a measure of radiation absorbed by the body)

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

2020 Regulated Contaminants Detected

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2021	0.4	0.34 - 0.48	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2021	4	1.7-6.1	No goal for total	60	ppb	N	By-product of drinking water chlorination
Total Trihalomethanes (TThm)*	2021	28	21.4-27.9	No goal for total	80	ppb	N	By-product of drinking water chlorination
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2021	0.57	0.57-0.57	0	10	Ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2021	0.0384	0.0384-0.0384	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2021	0.59	0.59-0.59	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Manganese	2021	78.6	78.6-78-6	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen] – Nitrate in drinking water at levels above 10ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue	2021	7	5.97-7.47	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

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.								
Selenium	2021	5.63	5.63-5.63	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits.
Sodium	2021	84.1	84.1-84.1			ppm	N	Erosion from naturally occurring deposits; Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	01/08/2019	1.21	1.21-1.21	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	01/08/2019	0.14	0.14-.014	0	15	pCi/L	N	Erosion of natural deposits.

Source of Drinking Water
BREESE IL0270250

Annual Water Quality Report for the period of January 1 to December 31, 20210

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 BREESE is Surface Water

For more information regarding this report contact: Name DALE DETMER Phone 618-526-7151

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Source Water Information

Source Water Name	Type of Water	Report Status	Location
INTAKE (01779) NEW SHOAL CREEK	RAW WATER INTAKE	SW	

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**CITY OF BREESE
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Lead & Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violations	Likely Source of Contamination
Copper	09/10/2020	1.3	1.3	0.084	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Water Quality Test Results

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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
Chlorine	12/31/2021	2	1.7-2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2021	45	32-54.5	No goal for total	60	ppb	N	By-product of drinking water chlorination
Total Trihalomethanes (TThm)*	2021	56	32.2-85.5	No goal for total	80	ppb	N	By-product of drinking water chlorination
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2021	0.049	0.049-0.049	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2021	0.7	0.694-0.694	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Manganese	2021	4	3.6-3.6	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate (measured	2021	0.07	0.07-0.07	10	10	Ppm	N	Runoff from fertilizer use; Leaching from

as Nitrogen								septic tanks, sewage; Erosion of natural deposits.
Selenium	2021	1	1.1-1.1	50	50	Ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	2024	37	37-37			ppm	N	Erosion from naturally occurring deposits; Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Like Source of Contamination
Atrazine	2021	0.32	0-0.32	3	3	ppb	N	Runoff from herbicide used on row crops
Simazine	2021	0.87	0-0.87	4	4	Ppb	N	Herbicide runoff.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	0.5 NTU	0.069 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.2 NTU	100%	N	Soil runoff.

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.

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 violations section.

Violation Table

Total Organic Carbon			
Total organic carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (dbp), MAJOR	10/01/2021	12/31/2021	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.