

PWS KY 1140038

2025 Water Quality Report

HIGH QUALITY DRINKING WATER

Testing is a crucial component of providing safe drinking water throughout Warren County. With over 19,000 water service connections in Bowling Green and over 29,000 Warren County Water District water connections, it is important that your water is constantly sampled and tested.

Over 2,800,000 automated tests are conducted throughout the distribution system every year, and our chemists perform over 280,000 manual tests per year.

BGMU is dedicated to providing safe, clean, and reliable drinking water to the community. Our water exceeds all Environmental Protection Agency (EPA) regulations, and we work diligently to provide a product that enhances your quality of life.

In order to ensure tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The data table on page 5 shows results of tests required by the EPA. Definitions are found to the right of each contaminant listed, and more definitions can be found on page 7.

BGMU is committed to protecting public health by delivering safe drinking water to our families and communities.



BGMU Board of Directors meet on the second Monday of each month at City Hall at 4:30 p.m. If you have any questions, please contact Doug Kimbler, Treatment Plants Superintendent, or Amila Mahmutovic, Chief Chemist, at 270-782-1200. You may also send an email to customerinquiry@bgmu.com.



Big Barren River Our Source Water

The source of drinking water (both tap and bottled water) includes 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, including some radioactive material. Water is also exposed to substances resulting from the presence of animals or from human activity.

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that shall provide protection for the public health.

BGMU uses the Big Barren River as its source of water. The Big Barren River flows out of the Barren River Reservoir, a floodcontrol lake designed to help prevent flooding in populated communities west of Allen and Barren counties. Drakes Creek joins the Big Barren River above BGMU's raw water intake. Drakes Creek is fed by Trammel Creek and flows north out of Franklin, Kentucky.

The final source water assessment with the system's susceptibility to potential sources of contamination is available for review at the Barren River Area Development District (B.R.A.D.D.) office located at 177 Graham Avenue. A summary of the susceptibility of the BGMU public water supply to contamination indicates that the susceptibility is generally moderate. There are, however, some areas of concern. There are two bridges located in the area near the intake. Should an accidental release of contaminants occur at either of these sites, contaminants could potentially reach Bowling Green's intake.

In the immediate area around our water intake on the Barren River, there is one KPDES permitted discharger, several hazardous generators or transporters, Tier II hazardous chemical users, an inactive landfill, and underground storage tank facilities. Within the greater watershed, there are numerous permitted operations and activities and other potential contaminant sources that cumulatively increase the potential for the release of contaminants. These potential contaminant sources include several underground storage tanks, oil and gas wells, bridges, agricultural use, hazardous chemical users (one of which is registered with the Toxic Release Inventory System), and Tier II hazardous chemical users. If you have any questions about the source water assessment, including the susceptibility analysis, you may contact the B.R.A.D.D. office at 270-781-2381.



Contaminants That May Be Present in Source Water

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 stormwater 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 stormwater 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 stormwater runoff and septic systems.

Radioactive Contaminants, which can be naturallyoccurring or be the result of oil and gas production and mining activities.





2024 Test Results PWS ID# KY 1140038

The data presented in this table are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by the EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Definitions can be found on page 7.

Contaminant	MCL	MCLG	Highest Level Detected	Range	Compliance Achieved	Major Sources in Drinking Water
			MICROBIOLOGICAL			
Total Organic Carbon (ppm) 2024	TT*	n/a	1.43 (Lowest Running Annual Average)	0.80-2.27 (Monthly Ratios)	YES	Naturally present in the environment.
Turbidity (ntu) (%) 2024	TT = 1 ntu TT = 95% of monthly sam- ples < 0.3 ntu	n/a	0.093	0.013-0.093	YES	Soil runoff.
			RADIOLOGICAL			
Alpha Emitters (pCi/l) 2016	15	0	ND	n/a	YES	Erosion of natural deposits.
Combined Radium (pCi/l) 2016	5	0	ND Measured as RA-228 + RA-226	n/a	YES	Erosion of natural deposits.
			INORGANIC			
Copper (ppm) 2024	AL = 1.3	0	90th percentile 0.017 with 0 sites above AL	ND-0.034	YES	Corrosion of household plumbing systems. Erosion of natural deposits.
Lead (ppb) 2024	AL = 15	0	90th percentile < 2.0 with 1 site above AL	ND-24.0	YES	Corrosion of household plumbing systems. Erosion of natural deposits.
Barium (ppm) 2024	2	2	.034	n/a	YES	Erosion of natural deposits.
Fluoride (ppm) 2024	4	4	0.81	n/a	YES	Additive that promotes strong teeth.
			DISINFECTION BYPRODUCTS			
Haloacetic Acids (ppb) Stage 2 2024	60	n/a	48.0 = High Site Average	17-72	YES	By-product of drinking water disinfection.
Total Trihalomethanes (ppb) Stage 2 2024	80	n/a	68.0 = High Site Average	21-105	YES	By-product of drinking water disinfection.
Chlorine (ppm) 2024	MRDL = 4	MRDLG = 4	1.9 Annual Average WTP**	0.21-2.58	YES	Water additive used to control microbes.
			SECONDARY CONTAMINANTS			
Chloride (ppm) - 2024	250	n/a	23.1	n/a	YES	n/a
Sulfate (ppm) - 2024	250	n/a	28.6	n/a	YES	n/a
Aluminum (ppb) - 2024	50-200	n/a	80	n/a	YES	n/a
			NITRATES & SYNTHETIC ORGANICS			
Nitrate (ppm) 2024	10	10	0.841	n/a	YES	Surface runoff. Septic tanks. Erosion of natural deposits.

BGMU collects and processes 60 distribution samples each month, testing for total coliforms and E. coli. None of our compliance (distribution) samples tested positive for coliforms in 2024. No violations for turbidity occurred during the 2024 monitoring period.

Bowling Green's water is tested daily for hardness. The annual average for Total Hardness was 150.2 ppm.

Bowling Green's water was tested for sodium in February. The sodium level was 11.8 ppm.

Bowling Green's water was tested for calcium in February and September. The calcium levels were 47.4 ppm and 46.8 ppm, respectively.

(*) Treatment Technique for TOC is based on the lowest running annual average of the monthly ratios of the % TOC removal achieved to the % TOC removal required. A minimum ratio of 1.00 is required to meet the TT.

(**) The BGMU Water Treatment Plant continuously chlorinates finished water for disinfection purposes. In 2024, the annual average concentration of free chlorine in the distribution system was 1.23 ppm. The range reported for chlorine reflects testing in the distribution system.

WHAT DO I NEED TO KNOW ABOUT LEAD?

There is a national focus to minimize the risk of lead getting into drinking water. There is no lead in drinking water when it leaves BGMU's treatment plant. However, corrosion of pipes, plumbing fittings, and fixtures may cause lead and copper to enter drinking water. To assess corrosion of lead and copper, BGMU conducts tap sampling at selected sites as required by the Environmental Protection Agency (EPA). We treat water using pH control and the addition of Calcium Carbonate (lime) to balance water chemistry and minimize the risk of lead entering the water as it comes into contact with pipes and plumbing material that may contain lead. BGMU also tests for lead in schools and licensed child care facilities as requested by the facility. The following information is provided by the Environmental Protection Agency (EPA):

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. BGMU is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing of your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk.

Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, please send an email to leadprogram@bgmu.com. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.



WHERE CAN I FIND SERVICE LINE INVENTORY DATA?

BGMU's service line inventory can be found on our website at https://bgmu.com/waterservicelines.

Enter your address and click on the blue circle associated with your property.

VAZNO

Ovaj report sadrzi veoma vazne informacije o vodi za pijenje. Prevedi ovaj report ili razgovaraj sa nekim ko razumije dobro podatke iz reporta.

ATTENCION

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

Important Information about Your Drinking Water

Availability of Monitoring Data for Unregulated Contaminants for Bowling Green Municipal Utilities



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As required by the US Environmental Protection Agency (EPA), BGMU has sampled for a series of unregulated contaminants. This is the fifth round of unregulated contaminant monitoring (UCMR5) that includes samples for twenty-nine (29) per– and polyfluoroalkyl substances (PFAS) and lithium. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a regulated public health protection standard.



BGMU has completed all required USEPA UCMR5 testing. Our quarterly testing results were "non-detect" for all thirty (30) UCMR5 contaminants.

WHAT ARE PFAS?

Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products such as non-stick cookware, waterproof fabric, fast food packaging, pesticides, and stain repellants. They are also used in industrial applications such as in firefighting foams and electronics production.

Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). These have been phased out of production in the United States. The EPA says most of our exposure to PFAS chemicals comes from consumer goods and not drinking water. However, scientists routinely detect PFAS in lakes, rivers, and groundwater. EPA's Unregulated Contaminant Monitoring Rule program, or UCMR, will be used to determine if new drinking water limits need to be created.

WHERE CAN I FIND MORE INFORMATION?

More information on PFAS can be found at https://www.epa.gov/pfas.

If you'd like more information regarding the Fifth Unregulated Contaminant Monitoring Program, the EPA UCMR5 Fact Sheet can be accessed at www.epa.gov/system/files/documents/2022-02/ucmr5-factsheet.pdf.



Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. BGMU tests for Cryptosporidium in our source and finished water. No Cryptosporidium detections were found in the four finished water samples collected in 2024, and no Cryptosporidium detections were found in the four source water samples collected in 2024.

At the present time, there is no Maximum Contaminant Level (MCL) established for Cryptosporidium. Therefore, we are not required to test for these organisms. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Our monitoring indicates the presence of low levels of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. The presence of these organisms does not cause us concern because we have not had any detections in finished water. Nevertheless, we will continue testing for the organisms to ensure public health is protected.

NOTICE: Important Information

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 for 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).

Another source for information on water quality is the KY Division of Water's website, https://eec.ky.gov.

Explanation of Expected Contaminants

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Definitions

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (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 (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 (MRDL): The

highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

Not Applicable (n/a): Does not apply.

ND: Not detected.

Nepthelometric Turbidity Units (NTU): A measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Picocuries per liter (pCi/l): A measure of radioactivity.

Parts per billion (ppb): Equal to micrograms per liter. One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per million (ppm): Equal to milligrams per liter. One part per million corresponds to one minute in two years or a single penny in \$10,000.

Total Coliform Bacteria: Coliform bacteria are an indication that disease-producing organisms may be present in the water supply. Total coliform bacteria includes bacteria that is found in soil, in water that is on or near the ground, and in human or animal waste.

Turbidity: The cloudiness of water.