WATER QUALITY REPORT

PROVIDED TO YOU BY BOWLING GREEN MUNICIPAL UTILITIES
801 CENTER STREET, BOWLING GREEN, KY 42101
www.bgmu.com • (270) 782-1200

From the General Manager . . .

In compliance with the Federal Safe Drinking Water Act and to help you better understand the process of providing a continuous supply of reliable water to the Bowling Green area, we have produced this Water Quality Report. This report is for the 2003 calendar year unless otherwise stated. Also available in this report is where your water comes from, what it contains and how it compares with Federal Environmental Protection Agency (EPA) and Kentucky Standards.

For over 75 years, your utility, Bowling Green Municipal Utilities, has been dedicated to supplying our customers with quality drinking water. With over 16,000 water service connections in Bowling Green, it is important that your water be constantly sampled and tested. Your Water Treatment Plant houses a certified laboratory where testing is performed as required by the Environmental and Public Protection Cabinet. Approximately 1,300,000 water quality tests are performed annually to ensure the quality of your drinking water.

Please let us know if you need further information or have suggestions on how we may better serve you.

Bowling Green Municipal Utilities is your utility and is grateful for the opportunity to serve you.

ATTENCION

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

BGMU Management

Larry Miller
Diana McQuady
Mike Gardner
Bill Borders
Teresa Newman
Jill Hartley

Bowling Green Municipal Utilities holds its Board of Directors meetings on the second Monday of each month at City Hall at 7:00 p.m.

BIG BARREN RIVER - OUR SOURCE WATER

The sources of drinking water (both tap 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 including some radioactive material. Water is also exposed to substances resulting from the presence of animals or from human activity.

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. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide protection for public health.

Bowling Green Municipal Utilities uses the Big Barren River as its source of water. The Big Barren River flows out of the Barren River Reservoir, a flood-control lake designed to help prevent flooding in the 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. These three surface water bodies are the sources which BGMU treats to provide your drinking water supply.

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 Bowling Green Municipal Utilities 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, these contaminants could potentially reach Bowling Green's intake.

There are also areas of the Barren River that have been classified as impaired, one KPDES permitted discharger, several hazardous generators or transporters, Tier II hazardous chemical users, an inactive landfill, and an underground storage tank located in the immediate area around the intake. 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 B. J. Malone at (270) 781-2381.

WATER TREATMENT PROCESS

1. Water from Barren River is pumped into the water plant through a screen to remove plant debris and fish.
2. At the flash mix, treatment chemicals are added to clump small particles together and remove contaminants.
3. Flocculation, the clumping together of particles called “floc,” takes place in the sedimentation tanks.
4. The cleaner settled water is sent to filters which remove fine particles that were not removed during sedimentation.
5. Filtered water is chlorinated and sent to the clearwell. Chlorine is a strong disinfectant which kills disease-causing bacteria.
6. Pumps are used to deliver clean drinking water to the water storage tanks and to your home.

Explanation of Expected Contaminants

Drinking water, including bottled water, may reasonably be expected to contain a small amount 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 Environmental Protection Agency’s Safe Drinking Water Hotline at 1-800-426-4791.

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 a 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 naturally-occurring or be the result of oil and gas production and mining activities.

Definition of Terms

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

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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant 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.

n/a: Not applicable.

ntu (nephelometric turbidity units): Units that measure the cloudiness of water.

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

ppb (parts per billion): Equal to micrograms per liter.

ppm (parts per million): Equal to milligrams per liter.

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: A measure of the cloudiness of the water. The measurement of turbidity is a good indicator of the water’s quality.

TT (Treatment Technique): Required process intended to reduce the level of contaminants in drinking water.

<: Less than.

NOTICE: Important Information

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 people and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Center for Disease Control (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 at 1-800-426-4791.

Another source for information on water quality is the KY Division of Water’s website: www.water.ky.gov/dw/

2003 Test Results

The data presented in this table is from the most recent testing done in accordance with the State and Federal Public Water Supply Administrative Regulations.

* 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 miniumum ratio of 1.00 is required to meet the TT.

** Turbidity is a measure of the cloudiness of the water. BGMU did not meet the Treatment Technique requirement in January 2003 for turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

10.75% of our January samples were greater than 0.3 turbidity units. The standard is not more than 5% of the monthly samples may be greater than 0.3 turbidity units.

Construction activities at the plant resulted in reduced filtering capacity at the plant. High water demand, very cold temperatures and low raw water turbidity further impacted the plant's ability to remove turbidity. Additional filter aid chemicals were used to reduce finished water turbidity. A different coagulant has been utilitized since this occurrence and we have consistently stayed below 0.3 turbidity units since making these changes. Public Notification regarding this violation was published in the Daily News Newspaper on February 28, 2003 and notices were sent to all bill paying customers with their March 2003 bills.

*** Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems and may have an increased risk of getting cancer.

- BGMU takes 60 distribution samples per month for Total Coliform Analysis. No compliance samples tested positive for Total Coliforms during the 2003 calendar year.

- Bowling Green's water was tested for sodium in January and July. The sodium levels were 4.1 mg/L and 4.6 mg/L respectively.

- *Cryptosporidium* is a microbial pathogen found in surface water throughout the United States. BGMU tests for cryptosporidium in our source and finished water. There were no detections in the finished water, however, there were five detections in the source water out of twelve samples taken in 2003.

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 percent 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 the finished water. Nevertheless, we will continue testing for the organisms to ensure the public health is protected.

BOWLING GREEN MUNICIPAL UTILITIES
P.O. BOX 10300
BOWLING GREEN, KY 42102-7300

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BGMU IS PROUD TO REPORT THAT YOUR DRINKING WATER MEETS AND EXCEEDS THE QUALITY REQUIRED BY ALL FEDERAL AND STATE REGULATIONS!

FOR MORE INFORMATION CONTACT LAURA HAYES, CHIEF CHEMIST, 270-782-4571

Additional copies of this Water Quality Report are available at our main office located at 801 Center Street; or visit our web site at www.bgmu.com. If you have any questions, please contact us at (270) 782-1200.

Larry Miller, General Manager

"KEEPING OUR RIVER WATER CLEAN IS EVERYONE'S RESPONSIBILITY"

IF YOU'RE UNSURE ABOUT WHAT TO DO WITH ANY WASTE PRODUCT, CONTACT:

- Local authorities (trash disposal or environmental protection officials, the health department, etc.).
- The U.S. Environmental Protection Agency (EPA).