

ANNUAL DRINKING WATER QUALITY REPORT
MIDDLEBURG MUNICIPAL AUTHORITY
YEAR 2017
PWSID #4550016

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak with someone who understands it.)

We are pleased to present to you this year's Annual Drinking Water Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of our water. Our water source is surface water coming from Bowersox Run and Erb Run, both located on Shade Mountain, Franklin Township, Snyder County. As additional security to ensure residents will always have water, two backup wells are ready for use and are located at the water treatment plant on Coonhunter Road in Franklin Township, Snyder County. A third well is in the process of being established.

I am pleased to report that our drinking water meets all federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact the Middleburg Borough office at 570-837-2533. The Middleburg Municipal Authority wants our valued customers to be informed about their water utility. If you want to learn more, please feel free to attend any of the regularly scheduled Municipal Authority meetings which are held on the second Tuesday of each month at 6:00 PM in the Middleburg Borough Building, 13 North Main Street, Middleburg, PA 17842-1007.

The Middleburg Municipal Authority routinely monitors the ingredients in your drinking water according to Federal and State laws. The table included in this report shows the results of our monitoring for the period of January 1, 2017 through December 31, 2017. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

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/Centers 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 - (800-426-4791).

In the tables that follow you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following 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 “Maximum Allowed” (MCL) is 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 “Goal” (MCLG) is 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 Goal (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.

Parts per million (PPM) or Milligrams per liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

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

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Chemical Contaminant	MCL In CCR Units	MCLG	Highest Level Detected	Range of Detections	Units	Violation Y/N	Sources of Contamination
Barium (2011)	2	2	0.03	N/A	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Total Trihalomethanes TTHMs	80	N/A	383	13 - 383	ppb	N	By-product of drinking water chlorination.
Haloacetic Acids HAA	60	N/A	21.7	6.2 - 21.9	ppb	N	By-product of drinking water disinfection.
Nitrate	10	10	0.0	N/A	ppm	N	Naturally present in the environment.

Contaminant	Action Level (AL)	MCL G	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Of TT Y/N	Sources of Contamination
Lead (2016)	15	0.0	4.3	ppb	0 out of 10	N	Corrosion of household plumbing
Copper (2016)	1.3	1.3	0.21	ppm	0 out of 10	N	Corrosion of household plumbing

Information about Lead:

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. Middleburg Borough Water Authority is responsible for providing high quality drinking water, but 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>.

Microbial Contaminants	MCL	MCL G	Highest # or % of Positive Samples	Violation Y/N			
Total Coliform Bacteria	For systems that collect < 40 samples/month: More than 1 positive monthly sample For systems that collect ≥ 40 samples/month: 5% of monthly samples are positive	0	0%	N			Naturally present in the environment

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminants	TT	MCLG	Assessments/ Corrective Actions	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Naturally present in the environment.

Total Organic Carbon (TOC)					
Contaminant	Range of % Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination
TOC	ACC	ACC	0	N	Naturally present in the environment

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.2	0.8	0.8-1.3	ppm		N	Water additive used to control microbes.

Contaminant	MCL	MCL G	Level Detected	Sample Date	Violation Of TT Y/N	Source of Contamination
Turbidity	TT=1NTU for single measurement	0	NTU .30	07/14/2017	N	Soil runoff
Turbidity	TT=at least 95% of monthly samples <0.3 NTU	0	95%	07/14/2017	N	Soil runoff

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

VIOLATIONS: Failure to distribute 2017 CCR on or before July 1st 2018.

EDUCATIONAL INFORMATION:

All sources of drinking water are subject to potential contaminants that are naturally occurring or man made. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials.

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 could 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.

In order to ensure that tap water is safe to drink, EPA and DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 the 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.

CONSERVATION OF WATER:

Water is an important natural resource. It is used every day at home and at work in so many ways that many take it for granted. Be aware of personal water use, as awareness is the first step in conservation.

Water saving plumbing fixtures and appliances are cost effective, providing permanent long-term economic advantages. Low-flow toilets, shower heads and faucet aerators save valuable water and energy used to heat water without requiring a change in personal use habits.

A dripping faucet is more than annoying and its expensive. Even small leaks can waste significant amounts of water. Hot water leaks are not only a waste of water, but also of the energy needed to heat the lost water.

Leaks inside a toilet can waste up to 200 gallons of water a day. Toilet leaks can be detected by adding a few drops of food coloring to water in the toilet tank. If the colored water appears in the bowl, the tank is leaking. Repair leaking faucets and toilets in a timely manner. Never use your toilet as a trash can!

Tips to save water inside the home:

- 1) Turn the faucet off while brushing your teeth. Use a glass of water for rinsing teeth.
- 2) When shaving, fill the sink with rinse water and do not let the faucet flow.
- 3) Take short showers instead of baths and consider bathing small children together.
- 4) If the shower has a single hand control or shut off valve, turn off the flow while soaping or shampooing.
- 5) Refrigerate a bottle of drinking water instead of letting a faucet flow until the water is cold enough to drink.
- 6) Turn the faucet off while cleaning vegetables. Rinse them in the sink with the drain closed or in a pan.
- 7) When washing dishes by hand, do not leave the faucet flowing for rinsing. Instead, use a dish rack and spray device to rinse them. If there are two sinks, fill one with soapy water and one with rinse water.
- 8) Fill the sink with water to pre-rinse dishes before putting them in the dishwasher.

Tips to save water outside the home:

- 1) Use a broom, not a hose, to clean driveways, steps and sidewalks.
- 2) Wash the car with water from a bucket. If a hose is used, control the flow with an automatic shut off nozzle.
- 3) Water the lawn only when needed. If grass does not spring back after walking on it, it probably needs water.

- 4) Water the lawn or garden during the coolest part of the day. Do not water on windy days.
- 5) Set sprinklers to water the lawn or garden only. Do not water the street or sidewalk.
- 6) Use soaker hoses and trickle irrigation systems to reduce the amount of water used by 20% to 50%.
- 7) Mulch around shrubs and garden plants to reduce evaporation from the soil and inhibit weeds.
- 8) When landscaping, use native plants that require less care and water than ornamental varieties.
- 9) Cover the swimming pool to prevent evaporation.
- 10) Adjust the lawn mower to a higher setting to provide natural ground shade and to promote water retention by the soil.

OTHER INFORMATION:

Please feel free to contact the Borough office at 570-837-2533 if you have questions.

Middleburg Borough employees who operate and maintain the water treatment system, owned by the Middleburg Municipal Authority, work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future. Please help to conserve our water.