

2016 Annual Drinking Water Quality Report - Mercersburg Water Authority (PWSID# 7280021)

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con a l i e n que lo entienda bien.

We are pleased to present to you this year's *Annual Drinking Water Quality 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 your water.

Our water sources (surface and ground) are a reservoir that feeds off the Buck Run and two wells - the Buck Run Well and the Mountain Well, which are all located just off of Pennsylvania Route 16 at the end of Stony Batter Road, above Buchanan's Birth Place State Park. A Source Water Assessment of the Buck Run and Mountain Wells, respectively, which supplies water to the filtration plant, was completed in 2007 by the PA Department of Environmental Protection (PADEP). The Assessment has found that the Buck Run Well is potentially most susceptible to agriculture and high-density development activities. Overall, the Buck Run Well has little risk of significant contamination. Summary reports of the Assessment are available upon request at the Borough office, and will be available on the PADEP website at www.dep.state.pa.us (Keyword: "DEP source water"). Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PADEP Harrisburg Regional Office, Records Management Unit.

The Mercersburg Water Authority routinely monitors for constituents in your drinking water according to Federal and State laws. We are pleased to report that our drinking water meets federal and state requirements. This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact the Borough Manager at (717) 328-3116.

We want our valued customers to be informed about their water utility. If you want to learn more, please feel free to attend any of our regularly scheduled Mercersburg Water Authority meetings. They are held on the third Thursday of each month at Borough Hall (7:00 p.m.)

The following table shows the results of our monitoring for the period of: January 1, 2016 to December 31, 2016. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (me): 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.

Maximum Residual Disinfectant Level (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 (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 contamination.

Picocuries per liter (pCi/L): Picocuries per liter is a measure of the radioactivity in water. **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.

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

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

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

MCL's are set as close to the Maximum Contaminant Level Goals as feasible using the best available treatment technology. MCL's are set at very stringent levels for health effects. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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.

TEST RESULTS FOR 2016

Turbidity

Contaminant (Unit of)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
1.Turbidity (ntu)	N	0.58 02/16	(b)	n/a	TT	Soil runoff

Chemical Contaminants

TTHMs [Total trihalomethanes] (ppb)	N	29	(d)	n/a	80	By-product of drinking water disinfection
Haloacetic Acids (HM) (ppb)	N	18	(d)	n/a	60	By-product of drinking water disinfection
Chlorine (ppm)	N	1.4	0.87-1.4		MRDL & MRDLG ⁴	Water additive used to control Microbes.
Total organic carbon (ppm)	N	0.7	e	n/a	~	Naturally present in the Environment.
Nickel (ppm)	N	0.007	a	n/a	n/a	erosion of natural deposits

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	1.0	1.0-2.2	ppm	2016	N	Water additive used to control Microbes

Lead and Copper

Contaminant	Action Level(AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	N.D.	ppb	1/10	N	Corrosion of household plumbing
4.Copper	1.3	1.3	0.38	ppm	0	N	Corrosion of household plumbing

Footnotes:

(a) Only one sample required.

(b) Jan., thru Dec. 2016 99.9% of Turbidity Samples met the turbidity limits

(d) Annual Average

(e) No MCL established: Source water tests indicated no % removal required.

(1) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfecting 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.

(4) Copper. Copper is an essential nutrient, but some people who drink water-containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

As you can see by the table, our system had no MCL violations for the 2016 calendar year. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected.

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. The Mercersburg 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://epa.gov/safewater/lead>. The Mercersburg Water Authority's most-recently required testing (September, 2016) indicated no presence of lead for the 90th percentile value whereas the Action Level (AL) of lead is 15 ppb.

All 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 EPA's Safe Drinking Water Hotline (800-426-4791). 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, radio-active material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it include:

- o Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.*
- o 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.*
- o Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses.*
- o Radioactive contaminants, which are naturally occurring.*
- o Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.*

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).