



2016 Quality on Tap Report

BROOKVILLE MUNICIPAL AUTHORITY WATER SYSTEM Public Water System ID #6330004

We are pleased to present our Annual Drinking Water Quality Report for the year 2016. *Este informe contiene informaci3n importante acerca de su agua potable. Haga que alguien lo traduzca para usted, 3n hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)*

WATER SYSTEM INFORMATION

This report is designed to inform you about the quality of water we deliver every day and what it means. Our goal is to provide you with a continuous, safe and dependable supply of drinking water. Through this report, we hope to explain the efforts we make to continually improve the quality of your water.

Our water source is a storage impoundment located on the North Fork of Redbank Creek. The water is treated, filtered, disinfected and pumped to the distribution system. A source water assessment was completed in 2003 by the PA Department of Environmental Protection (PADEP). The assessment found that the North Fork of Redbank Creek is potentially most susceptible to an accidental release of contaminants along major transportation corridors and bridges, runoff carrying nitrates and pathogens from fertilizers, manure spreading and other agricultural activities without Best Management Practices, storm water runoff from the roads and residential areas, malfunctioning on-lot septic systems and the cumulative effect of acid rain to waters which lack buffering capacity. Overall, the North Fork watershed has little risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: www.elibrary.dept.state.pa.us/dsweb/View/Collection-10045. 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 PADE Regional Office, Records Management Unit at (814) 332-6945.

MONITORING REQUIREMENTS

The Brookville Water Authority (BMA) routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2016. 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 data has been noted on the sampling results table. **We are pleased to report that our drinking water meets all Federal and State requirements.**

The Federal and State regulatory agencies require that our water does not exceed their Maximum Contaminant Levels (MCL's). These MCL's are set at very stringent levels for health effects. To understand the possible effects described for many regulated constituents, a person would have to drink two 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. The attached table compares those contaminants found to be present in the system's water with the regulatory limit of that substance. If the contaminant exceeds the limit at any time, a violation is said to occur. We are proud that our drinking water meets all Federal and State requirements. We have learned through our ongoing monitoring and testing that some constituents have been detected, but all are below acceptable levels.

FUTURE IMPROVEMENTS

The Authority recently replaced their 100-year old water treatment plant with a state-of-the-art, advanced water treatment facility using membrane technology. The new treatment facility produces excellent water quality that is well below the regulatory standards. The facility consistently removes turbidity, harmful pathogens and many other constituents found in the North Fork Source. The new facility stands as a testament to the Authority's continued commitment to providing a safe and affordable water supply to their customers.

CONTACT INFORMATION

If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the second Tuesday of every month at 4:00 p.m. at the Brookville Borough Municipal Building, 18 Western Avenue. **If you have any questions about this report or your water utility, please feel free to contact Dana Shick at 814-849-5320.**

**2016 Water Quality Report
Brookville Municipal Authority (PWS ID #6330004)**

Chemical Contaminants								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Barium	2 ppm	2 ppm	0.19	N/A	ppm	6/22/2016	N	Erosion of natural deposits, discharge of drilling wastes.
Fluoride*	2 ppm	2 ppm	<0.50	N/A	ppm	7/20/2016	N	Erosion of natural deposits.
Halogenated Acetic Acids (HAAs)	60 ppb	N/A	16.25 annual avg.	6.7-22.9	ppb	1/11/2016 4/11/2016 7/11/2016 10/11/2016	N	By-product of drinking water chlorination
Total Trihalomethanes (TTHM's)	80 ppb	N/A	37.88 annual avg.	6.5-73.2	ppb	1/11/2016 4/11/2016 7/11/2016 10/11/2016	N	By-product of drinking water chlorination

*EPA's MCL for Fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Entry Point Disinfectant Residual								
Contaminant	Minimum Disinfectant Residual		Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.4		0.89	0.89-1.77	ppm	7/20/2016	N	Water additive used to control microbes

Lead and Copper								
Contaminant	Action Level (AL)	MCLG	90th Percentile Value		Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0		ppb	0	N	Corrosion of household plumbing
Copper	1.3	1.3	0.053		ppm	0	N	Corrosion of household plumbing

Turbidity								
Contaminant	MCL	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Turbidity	TT= at least 95% of monthly samples ≤0.3 NTU	0	0.09	0.019-0.09	NTU	8/3/2016	N	Naturally present in the environment. Soil runoff.

Total Organic Carbon								
Contaminant	Range of % Removal Required	Range of Percent Removal Achieved	Number of quarters out of compliance	Range of Detections	Units		Violation Y/N	Sources of Contamination
TOC	TT*	N/A	0	0.57-1.648	ppm		N	Naturally present in the environment

*Treatment Technique = Alternative Compliance Criteria for TOC, <2.0 ppm

Definitions:

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MinRDL - Minimum Residual Disinfectant Level - The minimum level of residual disinfectant required at the entry point to the distribution system.

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

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

Level 1 Assessment – 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.

Level 2 Assessment - 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 bacterial have been found in our water system on multiple occasions.

ppm - One part per million. Comparable to one milligram per liter (1 mg/L). Corresponds to one minute in two years or a single penny in \$10,000.

ppb - One part per billion. Comparable to one microgram per liter (1ug/L). Corresponds to one minute in 2000 years or a single penny in \$10,000,000.

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

N/A - Not applicable.

EDUCATIONAL INFORMATION

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 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 byproducts 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.

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.

Drinking water, including bottled water, may be reasonably 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or by referring to the website at <http://www.epa.gov/safewater>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 at 1-800-426-4791.

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. Brookville Municipal Authority is responsible for providing a 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>.

Violations

No violations occurred in 2016