2017 Annual Drinking Water Quality Report

Municipal Authority of Buffalo Township (PWS ID: 5030019)



Este informe contiene información importante acerca de su agua potable. Haga que tradúzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you if needed.)

We are pleased to present our annual water quality report, which covers all testing completed from January through December 2016. 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 safe and dependable supply of drinking water. In addition, we want you to understand the efforts we make to continually improve the water treatment process, protect our water resources, and our commitment to ensuring the quality of your drinking water. If you would like to learn more about the Authority, public meetings are held on the third Thursday of each month, 7:00 p.m., at 707 South Pike Road.

Source Water Information

The Allegheny River is the main source of supply for the Municipal Authority of Buffalo Township's service area. The Stanley K. Swank Freeport Filter Plant is capable of producing 1.25 million gallons of water per day (MGD). An interconnection with Harrison Township Water Authority also exists in the event of an emergency.

In 2002, The Pennsylvania Department of Environmental Protection (DEP) conducted a Source Water Assessment for our intake on the Allegheny River. This assessment found that our source is potentially susceptible to accidental releases of contaminants from industrial sites upstream of the intake, accidental releases of petroleum products from upstream wells, storage sites and pipelines, and storm water runoff from developed areas adjacent to the river and its tributaries. A copy of the Source Water Assessment report can be obtained by contacting the local DEP office at (724) 925-5407. The Municipal Authority of Buffalo Township encourages you to participate in source water protection activities as they occur in your area.

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 can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include microbes, organic and inorganic chemicals, radioactive materials, or pesticides and herbicides. 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. In order to ensure that tap water is safe to drink, the Environmental Protection Agency (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. More information about contaminants and potential health effects can be obtained by calling the EPA'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/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.

Definitions of Terms Used in This Report

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 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 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.

NA: Not applicable

ND: Not detected

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of the water.

ppm (parts per million): One part substance per million parts water, or milligrams per liter.

ppb (parts per billion): One part substance per billion parts water, or micrograms per liter.

SS: Single sample

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

%: means percent.

90th Percentile: The highest concentration of lead or copper in tap water that is exceeded by 10 percent of the sites sampled during a monitoring period. This value is compared to the lead and copper action level (AL) to determine whether an AL has been exceeded.



The Stanley K. Swank Freeport Filter Plant

Water Quality Results

The Municipal Authority of Buffalo Township routinely monitors for constituents in your drinking water according to Federal and State Regulations. The following tables show the results of our monitoring for the period of January 1st to December 31st, 2016. If you do not understand the information and have questions concerning these results, or wish to request a hard copy of this report, please contact Kristy Donaldson, Authority Manager, at (724) 295-2703.

Turbidity

Substance (units)	Sample Date	MCL	MCLG	Highest Single Measurement	Violation Y/N	Typical Source
Turbidity (NTU) ¹	01/01/2016	TT	NA	0.02	No	Soil runoff

¹Turbidity – The measurement of the clarity of the water. Results were below and exceeded the treatment technique requirement of 0.3 NTU in 95% of all samples taken for compliance on a monthly basis.

Entry Point Chlorine Residual – Measured on Water Leaving the Treatment Plant

Entry I omt	Entry I out Chloring Residual - Weasured on Water Beaving the Treatment I lant											
Substance (units)	Sample Date	Minimum Disinfectant	Lowest Level	Range (low-high)	Violation Y/N	Typical Source						
		Residual	Detected									
Chlorine	07/11/2016	0.2	1.0	1.0 - 2.1	No	Water additive used to						
(ppm)						control microbes						

Regulated Substances – Measured on Water Leaving the Treatment Plant

Substance (units)	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Year Sampled	Violation Y/N	Typical Source
Barium (ppm)	2	2	0.032	SS	2016	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (ppm)	10	10	0.55	SS	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfectant Residual - Measured in the Distribution System

Substance (units)	Year Sampled	MRDL	MRDLG	Highest Amount Detected	Range ² (low-high)	Violation Y/N	Typical Source
Total							Water additive
Chlorine	2016	4	4	1.6	1.0 - 1.6	No	used to control
(ppm)							microbes

²Range represents the calculated monthly average of the results for the routine individual samples.

Other Regulated Substances - Measured in the Distribution System

Substance	Year	MCL	MCLG	Average	Range	Violation	Typical Source
(units)	Sampled			Results ³	(low-high)3	Y/N	
Total							By-product of
Trihalomethanes	2016	80	NA	63	29 - 120	No	drinking water
(TTHM) (ppb)							chlorination
Haloacetic							By-product of
Acids	2016	60	NA	32	18 - 51	No	drinking water
(HAA5)(ppb)							disinfection

³ Average results are the highest running annual average for individual sampling points. Range represents sampling at individual sample points.

Lead & Copper – Measured in the Distribution System

Substance (units)	Year Sampled	MCLG	Action Level	90 th Percentile Values	Number of Samples Above Action Level	Violation Y/N	Typical Source
Lead (ppb)	2016	0	15	3	0 out of 20	No	Corrosion of household plumbing.
Copper (ppm)	2016	1.3	1.3	0.053	0 out of 20	No	Corrosion of household plumbing.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested at your expense and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline.

Monitoring & Reporting Violation: On April 20, 2016, the Municipal Authority of Buffalo Township was issued a monitoring and reporting violation by the DEP for failure to monitor and report at least 90% of all required samples in a quarter for TTHM and HAA5. This was a result of not sampling in accordance with the schedule submitted to and approved by DEP. Samples **were** taken and reported; however, DEP requires us to report these samples as health affects unknown. The issue was addressed and corrected by improving our tracking of sample collection and providing our contract laboratory with our annual sampling schedule.