Annual Drinking Water Quality Report
Report Year: 2019
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 2019. This report is designed to inform you about the quality of water 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.

A *Source Water Assessment* of the Allegheny River near our intake was completed by the PA Department of Environmental Protection (PA DEP). The Assessment found that the contributing watersheds to the Allegheny River intake are potentially susceptible to contamination by roads, bridges, railroads, boating, barge traffic, auto repair, utility substations/power plants, combined sewer outfalls, pipelines and runoff from non-point sources such as residential developments. A summary report of the Assessment is available online at the Source Water Assessment Summary Reports eLibrary web page: http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4490. Copies of the complete report are available for review by calling the PA DEP Northwest Regional Office at (814) 332-6945.

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 amounts 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.

Turbidity: The measurement of the clarity of water. Results were below the treatment technique requirement of 0.3 NTU in 95% of all samples taken for compliance on a monthly basis throughout 2018.

%: 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, 2019. 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)	03/07/2019	TT	NA	0.10	No	Soil runoff

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

Substance (units)	Sample Date	Minimum Disinfectant Residual	Lowest Level Detected	Range (low-high)	Violation Y/N	Typical Source
Chlorine (ppm)	06/10/2019	0.2	0.6	0.6-2.5	No	Water additive used to 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	0.042	SS	2019	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Disinfectant Residual – Measured in the Distribution System

Substance (units)	Year Sampled	MRDL	MRDLG	Highest Amount Detected	Range (low-high)	Violation Y/N	Typical Source
Total Chlorine (ppm)	2019	4	4	1.86	0.99-1.86	No	Water additive used to control microbes

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

Other Regulated Substances – Measured in the Distribution System

Substance (units)	Year Sampled	MCL	MCLG	Average Results	Range (low-high)	Violation Y/N	Typical Source
Total Trihalomethanes (TTHM) (ppb)	2019	80	NA	68	27 - 112	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	2019	60	NA	31	22 - 35	No	By-product of drinking water disinfection

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	90th Percentile Values	Number of Samples Above Action Level	Violation Y/N	Typical Source
Lead (ppb)	2019	0	15	<5	0 out of 20	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2019	1.3	1.3	0.077	0 out of 20	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

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 Municipal Authority of Buffalo Township 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 *www.epa.gov/safewater/lead*.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. If the organism was detected, current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks.

Based on the results of the first round of *Cryptosporidium* monitoring, no additional treatment was required by the US EPA regulations. The Municipal Authority of Buffalo Township is currently conducting the second round of *Cryptosporidium* testing through February 2021.