SPRING TOWNSHIP WATER AUTHORITY

Annual Drinking Water Quality Report

2016 Calendar Year Data

PWS ID 4140118

Prepared June 2017

We are pleased to present to you this year's Annual Drinking Water Quality Report. (Este informe contiene información importante acerca de su agua potable. Haga que alguien lo tranduzca para usted, ó hable con alguien que lo entienda.) This report is designed to inform you about the quality of water and services that we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the quality of your water and to protect our water resources. Our primary water supply source during 2016 was the Carles Well located near the end of Mulbarger Lane. The Axeman Spring and the Bruss Spring/Lonebarger Well have been disconnected from the system as required by the Department of Environmental Protection. The Authority is currently working to develop an additional groundwater well for a back-up source.

MONITORING REQUIREMENTS

The Spring Township Water Authority routinely monitors for contaminants in your drinking water according to an Annual Monitoring Calendar provided by the PA Department of Environmental Protection. The table on the following page shows the results of our monitoring for the period of January 1st to December 31st, 2016. We are pleased to report that our drinking water regularly meets all federal and state requirements.

In order to ensure that tap water is safe to drink, the EPA has prescribed Maximum Contaminant Levels (MCLs) that limit the amount of certain contaminants in water provided by public water systems. MCLs 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.

The following table compares those contaminants found to be present in the system's water with the MCL for that substance. If the contaminant exceeds the MCL at any time, a violation is said to occur. As you can see by the table, our system had no violations. We're proud that our drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected, but all are below acceptable levels.

CLOSING

Thank you for allowing us to continue providing your family or business with clean, quality water this year. In order to maintain a dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. We appreciate your understanding and cooperation.

If you have questions about this report or concerns about your water utility, please contact us at (814) 355-7543 Ext. 5. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the fourth Wednesday of each month (unless publicly posted otherwise) at 7:00 p.m. at the Spring Township Municipal Building located at the intersection of Blanchard Street and Irish Hollow Road. Our mailing address is 1309 Blanchard Street, Bellefonte, PA 16823.

Thank you!

2016 Water Quality Report Spring Township Water Authority

Contaminant Name	Highest Level Allowed (MCL)	Treatment Goal (MCLG)	Highest Level Detected by STWA	Range of Detection by STWA	Sources of Contaminants in Drinking Water	Violations By STWA
			Inorganic C	ontaminants		
Barium (2015)	2 ppm	2 ppm	0.0237 ppm	N/A	Erosion of natural deposits. Discharge from metal refineries. Discharge of drilling wastes.	None
Nitrate	10 ppm	10 ppm	2.55 ppm	N/A	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks, sewage.	None
			Lead and C	opper Rule		
Lead	15 ppb Action Level	0 ppb	4.0 ppb 90th percentile	0 - 6.99 ppb No AL exceedences	Corrosion of household plumbing systems. Erosion of natural deposits.	None
Copper	1.3 ppm Action Level	1.3 ppm	0.125 ppm 90th percentile	0.0156 - 0.152 ppm No AL exceedences	Corrosion of household plumbing systems. Erosion of natural deposits.	None
	Disinfection B	yproducts (DPBs), Byprodι	ict Precursors and D	Disinfectant Residuals	
Total Trihalomethanes	80 ppb	N/A	15.1 ppb	N/A	By-product of drinking water chlorination.	None
Chlorine Distribution System	MRDL = 4 ppm	MRDLG 4 ppm	Highest monthly average = 0.7 ppm (Oct.)	0.6 - 0.7 ppm	Drinking water additive used to control microbes.	None
Chlorine Entry Point	MinRDL = 0.4 ppm	N/A	Lowest entry point residual = 0.4 ppm (2/9/16)	0.4 - 0.6 ppin	Drinking water additive used to control microbes.	None
			Radio	ogicai		
Radium - 226 (2015)	5 pCi/L	0 pCi/L	1.41 pCi/L		Erosion of natural deposits.	None

<u> Important Notes:</u>

- Only those contaminants found in the Authority's treated water are listed above, and all are below the allowable levels.
- The DEP allows us to monitor for some contaminants less than once per year and some data may be more than one year old.
- The Authority had two reporting violations in 2016 whereby they failed to submit their monthly results on time for the months of July and December. The data was submitted and there were no violations.

Definitions

(MCL) Maximum Contaminant Level - 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 best available 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. MCGL's 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 disinfectants are 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. (MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.)

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

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

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 (1 ug/L). Corresponds to one minute in 2000 years or a single penny in \$10,000,000.

pCi/L - Picocuries per liter, a measure of the radioactivity in water.

N/A - Not applicable.

HEALTH INFORMATION

All sources of drinking water (both tap and bottled), which include rivers, lakes, streams, ponds, reservoirs, springs and wells, are subject to potential contaminates that are naturally occurring or man made. 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 human activity.

Those contaminants that may be present in source water include:

- *Microbiological Contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- 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 refining.
- Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential use.
- Organic Chemical Contaminants, including synthetic and volatile 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 assure that tap water is safe to drink, EPA and DEP prescribes 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.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose 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 their website at http://www.epa.gov/safewater.

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. STWA 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.

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 from their health care providers about drinking water. 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 (1-800-426-4791).

About Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.