2017 ANNUAL DRINKING WATER QUALITY REPORT

PWSID# 7670071 Dillsburg Area Authority

Este informe contiene informacion importante acerca de su agua potable. Haga que alguien lo traduzca papa usted, o hable con alguien que lo entienda.

WATER SYSTEM INFORMATION:

Dillsburg Area Authority is pleased to present to you the 2017 Annual Drinking Water Quality Report. This report is designed to inform you about the quality 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.

If you have any questions about this report or concerning your water utility, please contact the Authority office at (717) 502-0431, Sheldon Williams, General Manager. 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 monthly meetings. They are held at the Authority Office located at 98 West Church Street, Dillsburg Borough on the third Tuesday of each month beginning at 9:30 a.m. Office hours are Monday thru Friday, 7:30 a.m. to 4:00 p.m.

SOURCES OF WATER:

The water provided to the Authority customers in 2017 came from five ground water wells, ranging in depth from 160 feet to 300 feet. Wells No. 1 and No. 3 are located in Franklin Township and draw from a Tomstown Formation aquifer. Well No. 4, a Limestone Fanglomerate aquifer, Well No. 5, a Gettysburg Formation aquifer, and Well No. 7, an Elbrook Formation, are all located in Carroll Township. We have a source water assessment report available from our office that provides more detailed information such as potential sources of contamination. This report is available for viewing upon written request. Our Source Water Protection Plan (SWP Plan) was completed in 2006 by Land Logics Group, Mechanicsburg, PA, and is available for public review at DAA Offices at 98 West Church Street, Dillsburg.

Before being delivered to the water distribution system, the water is treated for disinfection and corrosion control. Liquid sodium hypochlorite is added and allowed a minimum of 20 minutes of detention time for disinfection before being delivered to any customer's tap. Caustic soda and zinc pyrophosphate are added for corrosion control to reduce leaching of materials from pipes and other water fixtures into the drinking water. These are the only forms of treatment.

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).

MONITORING YOUR WATER:

Dillsburg Area Authority routinely monitors for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2017. 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 date has been noted on the sampling results table.

DEFINITIONS:

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

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

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.

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 contaminants.

Minimum Residual Disinfection Level – The minimum level of residual disinfectant required at the entry point to the distribution system.

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

ppm = parts per million, or milligrams per liter (mg/L)

ppb = parts per billion, or micrograms per liter (µg/L)

pCi/L = picocuries per liter (a measure of radioactivity)

DETECTED SAMPLE RESULTS:

Chemical Contaminants

Contaminant	MCL	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Typical Sources of Contamination
Barium	2	2	0.09	0.032-.09	ppm	05/2015	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	MRDL=4	MRDLG=4	0.67	0.36-1.48	ppm	02/2017	N	Water additive used to control microbes.
Chromium	100	100	2.1	N/A	ppb	05/2015	N	Discharge from steel & pulp mills; erosion of natural deposits
Nitrate	10	10	3.9	0.46-3.9	ppm	07/2017	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride*	2	2	0.14	N/A	ppm	05/2015	N	Erosion of natural deposits; discharge from fertilizer and aluminum factories
TTHMs [Total trihalomethanes]	80	N/A	12.7	10.5-12.7	ppb	07/2017	N	By-product of drinking water chlorination
HAA [Haloacetic acids]	60	N/A	3.0	2.8-3.0	ppb	07/2017	N	By-product of drinking water chlorination
Xylenes (Total)	10	10	0.0098	0.0-.0098	ppm	07/2015	N	Discharge from petroleum factories; discharge from chemical factories
Combined Radium	5	0	0.46	N/A	pCi/L	02/2014	N	Erosion of natural deposits
Ethylbenzene	700	700	0.6	0.0-0.6	ppb	07/2015	N	Discharge from petroleum refineries
Di(2-ethylhexyl) phthalate	6	0	1.1	0.0-1.1	ppb	2014	N	Discharge from rubber and chemical factories

**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	Typical Sources of Contamination
Chlorine–Entry Point 101	0.40	0.50	0.50-1.8	ppm	2017	N	Water additive used to control microbes
Chlorine-Entry Point 102	0.50	0.70	0.70-1.3	ppm	2017	N	
Chlorine-Entry Point 105	0.70	0.59	0.59-1.4	ppm	2017	N	
Chlorine-Entry Point 107	0.40	0.36	0.36-1.48	ppm	2017	N	

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	0.0	ppb	0 out of 20	2016	N	Corrosion of household plumbing systems; erosion of natural deposits
Copper	1.3	1.3	0.27	ppm	0 out of 20	2016	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

As you can see by the tables, our system had no monitoring violations. We are 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. The EPA has determined that your water IS SAFE at these levels. Dillsburg Area Authority received a late-reporting violation for Dioxin in the 2nd quarter of 2017. Dillsburg Area Authority collected the sample on time and the result was below the MCL. The violation occurred because the testing laboratory did not report the results to Department of Environmental Protection (DEP) in a timely manner.

EDUCATIONAL INFORMATION:

The sources of drinking water (both tap water and bottle 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 storm water run-off, 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water 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 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.

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 the Environmental Protection Agency's *Safe Drinking Water Hotline* (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. Dillsburg Area 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://www.epa.gov/safewater/lead.*