ANNUAL WATER QUALITY REPORT

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó 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.)

West Manchester Township Authority
Shiloh Water System
PWSID NO. 7670101

2017

WATER SYSTEM INFORMATION

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact John Horvatinovic at 717-764-3624. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the last Wednesday of the month at 8:00 pm at the Authority office, 2115 Log Cabin Rd., York, PA 17408.

SOURCE(S) OF WATER

The Authority operates nine (9) wells which are all located within West Manchester Township. Each well is disinfected by storage tanks with a combined capacity of 2,880,000 gallons.

A ***Source Water Assessment Plan*** was done for the Authority by the Department of Environmental Protection (DEP) in 2008 and is available for public review at our office at 2115 Log Cabin Rd, York, Pa 17408. Call 717-309-1244 to schedule an appointment to view the plan.

DEFINITIONS

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) – one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Picocuries per liter (pCi/l) – Picocuries per liter is a measure of the radioactivity in water.

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

Maximum Contaminant Level – The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal – The "Goal" (MCLG) is 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.

MONITORING YOUR WATER

The Authority 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 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 data has been noted on the sampling results table as follows:

DETECTED SAMPLE RESULTS

Contaminant - year	Violation Y/N	Level Detected	Units of Measure	Range	MCLG	MCL	Sources of Contamination
Arsenic - 2015*	N	8.0	ppb	0 – 8.0	N/A	10	Runoff from orchards, glass and electronics
Barium - 2015	N	0.60	ppm	0 – 0.60	2	2	Erosion of natural deposits
Fluoride - 2017	N	0.72	ppm	0.44 – 0.72	2	2	Additive which promotes strong teeth
Halocetic Acid - 2017	N	2	ppb	N/A	N/A	60	By-product of drinking water chlorination
Nitrate - 2017	N	2.55	ppm	1.12 – 2.55	10	10	Fertilizer use, septic tanks
Total Trihalomethanes 2017	N	15	ppb	N/A	N/A	80	By-product of drinking water chlorination
Combined Uranium-2017	N	6.20	ug/l	2.73 – 6.20	0	30	Erosion of natural deposits
Gross alpha - 2017	N	4.13	pCi/l	3.54 – 4.13	0	15	Erosion of natural deposits
Distribution Chlorine 2017	N	0.44	ppm	0.34 – 0.66	N/A	4	Disinfection
Contaminant	**Violation**	**90th Percentile Value**	**Unit of Measure**	**# of Sites Above AL**	**Action Level (AL)**	**MCLG**	**Source of Contamination**
Lead - 2016	N	0	ppb	0	15 ppb	0	Corrosion of household plumbing
Copper - 2016	N	0.46	ppm	0	1.3 ppm	1.3	Corrosion of household plumbing
Di (2-Ethylhexyl) Phthalate	N	3.40	ppb	0 – 3.40	0	6	Discharge from rubber and chemical factories

ENTRY POINT DISINFECTION RESIDUAL

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.40 – 0.90	0.06	0.06 – 1.20	ppm	2017	N	Water additive to control microbes

***Arsenic:** *While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.*

VIOLATIONS

Radium 226 and radium 228 were sampled late and reported late. Level detected was 0 (zero). Gross alpha was taken on time but reported late. Di (2-Ethylhexyl Phthalate) was detected in Qtr.3. Four quarterly samples will be taken in 2018. All entry point chlorine results were submitted late for March.

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. The Shiloh Water System 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*.

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 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. MCL's are set at very stringent levels for health effects. 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.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or manmade. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All 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. 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.

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).

All inquiries may be addressed to the Authority office at:

West Manchester Township Authority
2115 Log Cabin Rd.
York, PA 17408