2022 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

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 or 717-309-1244. 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 third Thursday of the month at 7:00 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 hypochlorination. System pressure is maintained by three 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 have 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.

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.

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, 2022. 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 - 2021*	N	7.0	ppb	0 – 7.0	N/A	10	Runoff from orchards, glass, and electronics
Barium - 2021	N	0.77	ppm	0.034 - 0.77	2	2	Erosion of natural deposits
Nickel - 2021	N	0.1	ppb	N/A	N/A	100	Discharge from industrial manufacturing
Fluoride - 2021	N	0.23	ppm	0.0 - 0.23	2	2	Erosion of natural deposits Discharge from fertilizer and aluminum factories.
Nitrate - 2022	N	3.46	ppm	1.44 – 3.46	10	10	Fertilizer use, septic tanks
Combined Uranium-2020	N	6.63	ug/l	3.69 – 6.63	0	20.1	Erosion of natural deposits
Gross alpha - 2022	N	8.73	pCi/l	3.23 – 9.64	0	15	Erosion of natural deposits
Distribution Chlorine - 2022	N	0.47	ppm	0.42 – 0.47	N/A	4	Disinfection
Contaminant	Violation	90 th Percentile Value	Unit of Measure	# of Sites Above AL	Action Level (AL)	MCLG	Source of Contamination
Lead - 2022	N	2	ppb	0	15 ppb	0	Corrosion of household plumbing
Copper - 2022	N	0.79	ppm	0	1.3 ppm	1.3	Corrosion of household plumbing

Please note that fluoridation was stopped 08/31/2020. The fluoride detected above is the fluoride level that occurs naturally in one of our wells from time to time.

ENTRY POINT DISINFECTION RESIDUAL

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date		Sources of Contamination
Chlorine	0.40 - 0.90	0.20	0.20 – 1.06	ppm	2022	-	Water additive to control microbes

Please note that whenever the chlorine residual has dropped below the minimum required, it has always been restored to its correct level within 4 hours as required by PA DEP.

<u>VIOLATIONS</u> There were no violations of any results in 2022 but there were three reporting violations. The first was a typographical error regarding a reported time that chlorine sample was taken. This was corrected with DEP. The second violation was first and second quarter samples for nitrates and nitrites that were missed and taken later with the results above. The third was a sample for haloacetic acid and total trihalomethanes taken July 27 instead of June 22 as required. The results were zero (0) for each one. The required public notification notice for these violations follows on the next page.

^{*}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.

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF SAFE DRINKING WATER

PUBLIC NOTICE

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER FAILURE TO MONITOR

ESTE INFORME CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE SU AGUA POTABLE. HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.

Monitoring Requirements Not Met for West Manchester Township Authority

Our water system violated several drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2022 we failed to monitor for the following contaminants and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

PWS ID#: 767.0101

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, the required sampling frequency, how many samples we took, when samples should have been taken, and the date on which corrective action samples were (or will be) taken.

Contaminant Required sampling frequency		Number of samples taken	When all samples should have been taken	When samples were or will be taken	
Nitrate & Nitrite	Quarterly	3 rd Quarter but not 1 st or 2 nd	Once every three months	9/21/2022	
Trihalomethanes	Annually within 3 days of June 22	1 but late	June 19-25, 2022	7/27/2022	
Halo Acetic Acids	Annually within 3 days of June 22	1 but late	June 19-25, 2022	7/27/2022	

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What happened? What was do	one? When will it be reso	lved?			
The samples in question were ta	ken as indicated above and	d all were within DEP	requirements.		
Please share this information with this notice directly (for example, posting this notice in a public pla	people in apartments, nurs	ing homes, schools, a			
For more information regarding to 1244	his notice, ّplease contact يا	ohn Horvatinovic		at	717-309-
Certified by: Signature: Print Name and Title: Manager	to the second se			Date: <u>03/30</u>	/2023
As a representative of the Public Water's customers in accordance with the delive Protection (DEP's) regulations. The follow	ry requirements outlined in Chap	ter 25 PA Code 109 Subc	hapter D of the Depar	tment of E	

Date distributed: 03/31/2023

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 are 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 runoff, 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 prescribe 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).

If you would like a hard copy of this report mailed or otherwise delivered to you, please contact John Horvatinovic at 717-309-1244 or our office at 717-764-3624. Please address all other inquiries to the Authority office at:

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