Sunbury Municipal Authority Water Department

2020

Annual Drinking Water Quality Report

PWSID# PA4490007

We are proud to report your drinking water meets all federal and state requirements.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alquien que lo enteinda bien.

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services 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 water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our primary source is Little

Shamokin Creek. Our back up supply is

The Susquehanna River.

The Sunbury Municipal Authority routinely monitors for constituents in your drinking water according to Federal and State laws. The table represented in this report shows the results of our monitoring for the period January 1, 2020 to December 31, 2020. Some of our data is from prior years in accordance with the Safe Drinking Water Act. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Source Water Protection in 1996, congress amended the Safe Drinking Water Act, creating the Source Water Assessment and Protection Program. Each state is required to identify and evaluate all sources of drinking water, assess the susceptibility of these sources for contamination, and promote the protection of them. To view this plan, contact our office at (570) 286-5858.

Microbiological Contaminants						
Contaminant (Units)	**Violation Y/N**	**Average Detection**	**Range of Detections**	**MCLG**	**MCL**	**Likely Source of Contamination**
Turbidity (% satisfied)	N	100%	NA	TT	0.3	Soil runoff
Prior percentages reflect plant performance, in which the Treatment Technique necessitates 95% of samples be <0.3 NTU.						
Contaminant	**Violation Y/N**	**% of Removal Required**	**% of Removal Achieved**	**MCLG**	**MCL**	
TOC	N	35%	49.3 - 65.9%	TT	N/A	Naturally present in the environment
Chemical Contaminants						
Contaminant (Units)	**Violation Y/N**	**Level Detected**	**Average Detection**	**MCLG**	**MCL**	**Likely Source of Contamination**
Fluoride (ppm)	N		1.35	2	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium (ppm)	N	0.0332	0.0332	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Calcium (ppm)	N	11.0 - 41.1	NA	NA	NA	Erosion of natural deposits
Magnesium (ppm)	N	3.65 - 17.3	NA	NA	NA	Erosion of natural deposits
TTHM (ppb)	N	11.7 - 45.7	26	0	80	By-product of drinking water chlorination
HAA5 (ppb)	N	6.67 - 18.5	12.7	0	60	By-product of drinking water chlorination
Xylene (ppm)	N	0.159	NA	10	10	Discharge from petroleum factories; discharge from chemical factories
Ethylbenzene (ppb)	N	0.0164	NA	0.7	0.7	Discharge from petroleum refineries
Lead and Copper						
Contaminant (Unit of Measurement)	**Violation Y/N**	**90th Percentile Value**	**# of Sites Above AL of Total Sites**	**MCLG**	**Action Level (AL)**	**Likely Source of Contamination**
Copper (ppm)	N	0.081	1 out of 43	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	N	1.67	2 out of 43	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

Disinfectant Residual						
Contaminant (Units)	Violation Y/N	Range of Detections	Average Detection	Minimum Disinfectant Residual	MRDLG	Likely Source of Contamination
Chlorine (ppm) Entry Point	N	0.74 - 2.78	NA	0.2	4	Additive to control microbes
Chlorine (ppm) Distribution	N	0.52 - 1.56	NA	0.2	4	Additive to control microbes

Test results represent most recent analysis and meet all Federal and State requirements

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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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

Health Effects

Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Copper. Copper is an essential nutrient, but some people who drink water-containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Chlorine. Some people who use water containing chlorine well in excess of the maximum residual disinfectant level could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the maximum residual disinfectant level could experience stomach discomfort.

TTHMs (Total Trihalomethanes, HAA5 Haloacetic Acid). Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

TOC. Total organic carbon has no health effects. However, TOC provides a medium for the formation of disinfection byproducts. These byproducts include THMs and HAAs. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Definitions

Contamination. All sources of drinking water are subject to potential contaminates by constants that are naturally occurring or manmade. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, can reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk.

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.

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.

MCL's. MCL's 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.

Lead. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for thirty (30) seconds to two (2) minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline 800.426.4791.

Violations

Monitoring Requirements Not Met for Several Contaminants. What should I do?

There is nothing you need to do at this time. The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for contaminants listed below and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples required	Number of samples taken	When all samples should have been taken	When samples were or will be taken
Volatile Organic Compounds (VOC)	Annually	1	0	2020	2021
TTHM (Disinfectant Byproduct)	Quarterly	1	0	October 12-18, 2020	October 30, 2020
Synthetic Organic Compounds (SOC)	Trienially	1	0	2nd Quarter 2020	3rd Quarter 2020
Total Coliform Bacteria	Monthly	10	9	Nov 2020	Dec 2020
Chlorine Disinfectant (Distribution)	Weekly	2	1	Jan, Nov 2020 Feb, Mar 2021	Feb, Dec 2020 Mar, Apr 2021

What happened? What was done?

Total coliform bacteria, chlorine disinfectant, and VOC samples were erroneously missed. Make-up samples were collected during the same monitoring periods or immediately after each monitoring period. TTHM samples were collected on time in October 2020, however the samples were not analyzed due to laboratory error. Make-up samples were collected on October 30, 2020. SOC samples were collected on time, however 6 SOCs were not analyzed due to laboratory error. Make-up samples were collected in August 2020. All sample results for the above-mentioned contaminants were below the Maximum Contaminant Levels (MCL) before and after the missed monitoring periods.

Late Reporting

Total coliform bacteria samples and chlorine disinfectant residuals were monitored in July 2020, however the sample results were reported late.

System Improvements

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. If you have any questions about this report or concerning your water utility, please contact our General Manager Jason Neidig at (570) 286-5858 during normal business hours 7:00 AM – 4:00 PM or visit us at our website www.sunburyma.org under "Departments" then Water. 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 Board of Director meetings. Sewer & Solid Waste meetings are held the first Tuesday of each month. Water and Flood Control meetings are held the third Tuesday of each month. All meetings begin at 7:00 PM at the Sunbury Municipal Authority Administration Center, located at 462 South 4th Street, Sunbury, PA 17801.

We work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

The Sunbury Municipal Authority Board

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