

2005 Annual Drinking Water Quality Report



Sunbury Municipal Authority Water Department

PWSID 4490007

We are proud to report that your
Drinking Water meets all Federal
and State requirements

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

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Definitions (continued)

(7a, 7b) 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.

(7c, 7d) Chlorine. Halogen element. Commonly isolated as a greenish yellow gas, two and one half times as heavy as air. It is abundant in nature, the most important compound being common salt. It is powerful oxidizing, bleaching, and disinfecting agent used to treat water and as a bleaching agent and disinfectant.

(8) TOC. Total organic carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfections 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.

*Additional information is available from the
Safe Drinking Water Hotline (1-800-426-4791)*

Contamination

All sources of drinking water are subject to potential contaminates by constants that are naturally occurring or man made. 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.

Nitrates

As a precaution, we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

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.

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. Rate adjustments may be necessary in order to address these improvements.

Please call our office if you have questions or visit our link under "Municipal Authority" on the web at: <http://www.cityofsunbury.com/nor-sunbury/site/default.asp>

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
462 South 4th Street • Sunbury, PA 17801
(570) 286-5858

The Authority Board

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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 water source is Little Shamokin Creek. Our back up supply is the Susquehanna River.

If you have any questions about this report or concerning your water utility, please contact our General Manager Danny Ramer at (570) 286-5858 during normal business hours 7:00 AM – 4:00 PM. 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.

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 1st, 2005 to December 31st, 2005. 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. Last year we conducted more than 300 tests for over 80 contaminants. All of them were taken accurately and on time, but four were recorded four days late resulting in a Recordkeeping Violation.

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 (Unit of measurement)	Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
1. Turbidity (ntu)	N	0.198	TT	.300	Soil runoff

Inorganic Contaminants

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
2. Copper (ppm) 90th centile = 0.00 1 sample tested above the action level	N	0.30	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
3. Fluoride (ppm) 8/03/04	N	1.00	2	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
4. Lead (ppb) 90th centile = 0.01 3 samples tested above action level	N	28	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
5. Nitrate (as Nitrogen) (ppm)	N	.25	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
6. Barium (ppm) 8/03/04	N	0.039	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Volatile Organic Contaminants

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
7a. TTHM (Range 6.5-103) [Total trihalomethanes] (ppb)	N	43.8 (3rd Quarter - 103)	0	80	By-product of drinking water chlorination
7b. HAA5's (Range 15.5-36.8) [Haloacetic Acids]	N	31.60 (4th Quarter - 36.8)	0	60	By-product of drinking water chlorination
7c. Chlorine Entry Point (Range 0.44-2.22) (Free Chlorine Residual) (ppm)	N	0.44	MRDL=4	MRDLG=4	Additive to control microbes
7d. Chlorine Distribution System (Range 0.67-1.36) (Free Chlorine Residual) (ppm)	N	1.36	MRDL=4	MRDLG=4	Additive to control microbes
8. TOC (Range 0.00-2.52)	N	2.52	TT	NA	Naturally present in the environment
9. Alpha/Excel. Radon & Uranium	N	0.20	0	15	Naturally present in the environment

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.

Definitions

(1) 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.

(2) 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.

(3) 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.

(4) 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.

(5) Nitrate. Infants below the age of six months who drink water-containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

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 advice from your health care provider.

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

9) Alpha/Excel. Radon & Uranium

Radon is a radioactive gas that you can't see, taste or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes and other household activities. Radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Radon is a human carcinogen.