Upper Saucon Township

1999 Annual Drinking Water Quality Report

Upper Saucon Township is pleased to present the *1999 Annual Drinking Water Quality Report.* This report is designed to inform you about the water quality and services delivered to you every day. The Township's constant goal is to provide you with a dependable supply of drinking water. The Township wants you to understand the efforts made to continually improve the water treatment process and protect its water resources. Upper Saucon Township is committed to ensuring the quality of your water. The Township purchases water from the City of Bethlehem, which is, treated surface water from the Penn Forest and Wild Creek Reservoirs located in Carbon County. This water is then blended with groundwater from the Township's Zinc Mine Well. This blending process was started on March 29, 1999. The Zinc Mine Well and water blending station are located near the northeast section of the Township on Camp Meeting Road.

Upper Saucon Township is pleased to report that its drinking water meets all federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Dan Stahlnecker, Superintendent of Water & Wastewater, at 610-694-8680. The Township wants its valued customers to be informed about the water utility.

Upper Saucon Township routinely monitors for constituents in the drinking water according to Federal and State laws. The following table shows the results of the Township's monitoring for the period of January 1st to December 31st, 1999. 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.

In this table you may find many terms and abbreviations that are not familiar to you. The following definitions will help you better understand these terms:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present at a detectable level.

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.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per **quadrillion** **(ppq)** or **Picograms** per **liter** **(picograms/l) -** one part per **quadrillion** corresponds to one **minute** in **2,000,000,000** years or one penny in **$10,000,000,000,000.**

Picocuries per **liter** **(pCi/L) -** picocuries per **liter** is a **measure** of **the** radioactivity in water.

Millirems per **year** **(mrem/yr) - measure** of radiation absorbed **by the body.**

Million Fibers per **Liter** **(MFL) - million fibers** per **liter** is a **measure** of **the** presence of asbestos **fibers** that are **longer** than **10 micrometers.**

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.

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

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.

TEST RESULTS

Microbiological Contaminants

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
1. Total Coliform Bacteria	N	0		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment

Radioactive Contaminants

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
5. Alpha emitters (pCi/1)	N	<2		0	15	Erosion of natural deposits

Inorganic Contaminants

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
12. Cadmium (ppb)	N	2		5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
14. Copper (ppm)	N	.256	.034 - .299	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride (ppm)	N	1.07	**(a)**	4	4	Erosion of natural deposits; water additive which promotes strong teeth discharge from fertilizer and aluminum factories
17. Lead (ppb)	N	12	.6 - 14	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
19. Nitrate (as Nitrogen) (ppm)	N	1.63		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
22. Thallium (ppb)	N	1		0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

Volatile Organic Contaminants

Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
73. TTHM [Total trihalomethanes] (ppb)	N	33	22 - 58	0	100	By-product of drinking water chlorination

F**oot**n**o**t**es**:

(**a**) This nu***mb**e*r was o***bt**ain**ed f**ro**m t**he ***C**i**ty** o**f B**e**t**h**l**ehe**m*** whose wa***t**e*r is ***fl**uori**d**a**ted.***

Upper Saucon Township also tests its drinking water for other Volatile Organic Contaminants (VOCs) and Synthetic Organic Contaminants (SOCs). None of these contaminants were detected.

As you can see by the table, the Township's water system had no violations. However, due to the new water blending process, some customers experienced "dirty" water. Corrosion of the existing water mains was determined to be the source of this problem. The Pennsylvania Department of Environmental Protection (D.E.P) gave the Township permission to add polyphosphate to the water system. Polyphosphate is approved by the Pennsylvania D.E.P and the United States Environmental Protection Agency for use in community water systems. It is NOT harmful to your health and has no side effects.

All sources of drinking water are subject to potential contamination by constituents 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, 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.

Maximum Contaminant Levels, (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.

To maintain a 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.

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).

Please call our office at 610-694-8680 if you have questions.