

2011 ANNUAL DRINKING WATER QUALITY REPORT
UPPER SAUCON TOWNSHIP
PWSID #: 3390077

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

WATER SYSTEM INFORMATION

This report shows our water quality and what it means. If you have any questions or concerns about this report or your water utility, please contact Daniel J. Stahlnecker at (610) 694-8680. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. The Board of Supervisors meetings are held on the 1st and 3rd Monday of each month at 6:30PM in the Township Building located on 5500 Camp Meeting Road.

SOURCES OF WATER

Upper Saucon Township has two water sources. The major source is groundwater from an artesian well (Entry Point #103) located on White Oak Road in the Pond's Edge Development near the southern end of the Township. The Township also purchases water from the City of Bethlehem, which is treated surface water from the Penn Forest and Wild Creek Reservoirs located in Tunkhannock Creek Watershed in Carbon County. This water is then blended with groundwater from the Township's Zinc Mine Well (Entry Point #101). The Zinc Mine Well and water blending station are located on Camp Meeting Road.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 microbial contaminants are available from the *Safe Drinking Water Hotline* (800-426-4791).

MONITORING YOUR WATER

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period January 1 to December 31, 2011. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not frequently change. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

DEFINITIONS

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) - 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 (MCLG) - 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.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

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

ABBREVIATIONS

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter (ug/L)

ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or picograms per liter

ppt = parts per trillion, or nanograms per liter

DETECTED SAMPLE RESULTS

Chemical Contaminants (Upper Saucon Township Water)								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate	10	10	2.65	0.543-2.65	ppm	5/6/11	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Cadmium	5	5	2	2	ppb	2009	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Uranium	30	0	0.280	0.210-0.280	pCi/l	4/25/11	No	Erosion of natural deposits
Ethyl Benzene	700	700	0.180	0-0.180	ppb	4/20/11	No	Discharge from petroleum factories
M&P-Xylenes	10000	10000	0.560	0-0.560	ppb	4/20/11	No	Discharge from petroleum factories Discharge from chemical factories
O-Xylenes	10000	10000	0.150	0-0.150	ppb	4/20/11	No	Discharge from petroleum factories Discharge from chemical factories
Toluene	1000	1000	1.42	0-1.42	ppb	4/20/11	No	Discharge from petroleum factories Discharge from chemical factories
TTHM's	80	N/A	10.6	1.3-10.6	ppb	2011	No	By-product of drinking water chlorination
HAA5's	60	N/A	3.2	2.0-3.2	ppb	2011	No	By-product of drinking water chlorination
Chlorine	MRDL=4	MRDL=4	0.77	2.7	ppm	2011	No	Water additive used to control microbes

Chemical Contaminants (City of Bethlehem Water)								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Fluoride	2	2	0.8	0.8	ppm	2011	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM's	80	N/A	34.7	15.1-51.5	ppb	2011	No	By-product of drinking water chlorination
HAA5's	60	N/A	31.7	7.0-47.0	ppb	2011	No	By-product of drinking water chlorination

Lead and Copper (Upper Saucon Township Water)							
Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0.48	ppb	0	No	Corrosion of household plumbing
Copper	1.3	1.3	0.187	ppm	0	No	Corrosion of household plumbing

Lead and Copper (City of Bethlehem Water)							
Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	1.8	ppb	1	No	Corrosion of household plumbing
Copper	1.3	1.3	0.083	ppm	0	No	Corrosion of household plumbing

Entry Point Disinfection Residual (Upper Saucon Township Water)							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine (EP 101)	1.0	0	0-3.35	ppm	2011	Yes	Water additive used to control microbes
Chlorine (EP 103)	1.0	0.29	0.29-2.64	ppm	2011	Yes	Water additive used to control microbes

Microbial (Upper Saucon Township Water)					
Contaminants	MCL	MCLG	Highest # of Positive Samples	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	For systems that collect <40 samples/month	0	2 of 81 samples taken	Yes	Naturally present in the environment.
Fecal Coliform Bacteria or <i>E. coli</i>	0	0	0	No	Human and animal fecal waste.

Note: City of Bethlehem reported that the highest monthly percentage of positive samples was 0.0% samples. Also, the City reported no detection of cryptosporidium.

HEALTH EFFECTS

Currently, the Township water supply has no contaminants that have any adverse health effects. All detected chemical contaminants were below the Maximum Contaminant Levels (MCL's) required by USEPA and PADEP. In addition, the City of Bethlehem reported no contaminants that have any adverse health effects. If you want more information about this information, please call us (610) 694-8680 or the State Drinking Water office (570) 826-2511.

OTHER VIOLATIONS

We failed to retain records and report our continuously monitored disinfectant residual data and therefore could not produce records that the data was actually collected continuously.

We failed to collect SOC samples in the second quarter of 2011 and failed to collect VOC samples in the third quarter of 2011. A copy of the violation notice has been attached to this report.

We had two violations relating to the presence of total coliform in several water samples. Total coliform was found to be present in 2 of the 81 samples taken throughout 2011. Subsequent testing showed that total coliform was no longer present in the water distribution system and there was never any threat to public health as a result of these violations.

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 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 stormwater 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 stormwater run-off 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 stormwater run-off 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 assure 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.

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* (800-426-4791).

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. Upper Saucon Township 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>.

OTHER INFORMATION

About Nitrate: 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 for advice from your health care provider.



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF WATER STANDARDS AND FACILITY REGULATION

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

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 Upper Saucon Township

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 April and May we failed to continuously monitor our entry point chlorine disinfection residual and during second quarter 2011 we failed to monitor for Synthetic organic compounds and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

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, how often we are supposed to sample for disinfectant residual as well as Synthetic organic compounds 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 taken	When all samples should have been taken	When samples were or will be taken
Disinfectant residual	Continuously monitor	One(1)	Continuously	continuously
Synthetic organic compounds	Quarterly	0	2 nd quarter 2011	3 rd quarter 2011

What happened? What was done?

We failed to retain record and report our continuously monitored data and therefore cannot produce the records that the data was actually collected continuously. We also failed to collect SOC

For more information, please contact Thomas Beil at 610-282-1171.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by: Upper Saucon Township.