

UPPER SAUCON TOWNSHIP



2017 ANNUAL DRINKING WATER QUALITY REPORT **PWSID# 3390077**



WATER SYSTEM INFORMATION

This report details the tap water quality for Upper Saucon Township. **Upper Saucon Township vigilantly safeguards its water supplies, and we are proud to report that in 2017 our water system has met all required Federal and State drinking water health standards.** If you have any questions about this report or your water supply, please contact Chris Cope, Director of Water/Sewer Resources at (610) 694-8680 or feel free to attend any regularly scheduled meeting of the Upper Saucon Township Board of Supervisors. The Board of Supervisors meet at 6:30 p.m. on the second and fourth Monday of each month in the Township Municipal Building located at 5500 Camp Meeting Road.



SOURCES OF WATER

Upper Saucon Township currently has three water sources. The major source (*Colonial Crest Station*) is groundwater from an artesian well (Entry Point #103) located near White Oak Drive. A second groundwater well (*Gun Club Station*) exists off Blue Church Road South (Entry Point # 108) near the southern end of the Township. The Township also purchases water from the City of Bethlehem, which is treated surface water from two reservoirs located in the Tunkhannock Creek Watershed. 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 off Camp Meeting Road.



MONITORING YOUR WATER

We routinely monitor for contaminants in your drinking water according to federal and state laws. The data, on the following page(s), show the results of our monitoring for the period of January 1 to December 31, 2017. 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 date has been noted on the sampling results table.



PARTNERSHIP FOR SAFE WATER

In 2007 the *Partnership* and the Water Research Foundation developed a project to help water distribution systems, such as Upper Saucon Township, optimize operations. Membership in the distribution program ensures that water quality improvements can be measured and validated over time. Distribution systems in the *Partnership* program can demonstrate that they are continuously committed to providing safe water 100 percent of the time. Participating systems can also benchmark their performance in relation to other utilities in their region and facilities across the nation. In 2013 Upper Saucon Township became a member of this program and is proud to further dedicate itself to improving the water quality to the people it serves.

Este informe contiene informacion importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ò hable con alguien que lo entienda.



Chemical Contaminants								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate	10	10	2.74	<1.0 - 2.48	ppm	2017	No	Runoff from fertilizer; leaching from septic tanks, sewage; natural deposits
Arsenic	10	0	4.0	0 - 4.0	ppb	2015	No	Erosion from natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2	2	0.113	0.010 - 0.113	ppm	2015	No	Discharge of drilling wastes; Discharge from metal refineries; natural deposits
Cadmium	5	5	0.4	<0.4 - 0.4	ppb	2015	No	Corrosion of galvanized pipes; Erosion of natural deposits; Runoff from battery and paint waste
Chromium	100	100	2	<1 - 2	ppb	2015	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2	2	0.3	<0.2 - 0.3	ppm	2015	No	Erosion of natural deposits; Water additive which promotes strong teeth
Selenium	50	50	3.0	<2.0 - 3.0	ppb	2015	No	Discharge from petroleum and metal refineries and mines; natural deposits;
Uranium	30	0	2.79	0.21 - 2.79	ppb	2011	No	Erosion of natural deposits
TTHM's	80	N/A	1.5	<0.5 - 3.40	ppb	2017	No	By-product of drinking water chlorination
HAA5's	60	N/A	3.1	<2.0 - 7.51	ppb	2017	No	By-product of drinking water disinfection
Chlorine	MRDL =4	MRDLG =4	1.1	1.06 - 1.40	ppm	2017	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	< 1.0	NA	ppm	2017	No	Water additive to promote strong teeth
TTHM's	80	0	47	21-70	ppb	2017	No	By-product of drinking water chlorination
HAA5's	60	N/A	34	1 - 42	ppb	2017	No	By-product of drinking water disinfection

Lead and Copper - Data collected in 2016							
Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Lead	15	0	Non-Detect	ppb	0	No	Corrosion of household plumbing; Natural deposits
Copper	1.3	1.3	0.320	ppm	0	No	Corrosion of household plumbing; Natural deposits

Lead and Copper (City of Bethlehem Water) - Data collected in 2016							
Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL	Violation of TT Y/N	Sources of Contamination
Lead	15	0	2.0	ppb	2	No	Corrosion of household plumbing; Natural deposits
Copper	1.3	1.3	0.107	ppm	None	No	Corrosion of household plumbing; Natural deposits

* For more information about the City of Bethlehem's report, please refer to the City of Bethlehem Water Quality Report at: <https://www.bethlehem-pa.gov/water/ccr/index.html>

Entry Point Disinfection Residual							
<i>Contaminant</i>	<i>MinRDL</i>	<i>Lowest Level Detected</i>	<i>Range of Detections</i>	<i>Units</i>	<i>Sample Date</i>	<i>Violation Y/N</i>	<i>Sources of Contamination</i>
Chlorine (EP 101)	1.0	1.00	1.00 – 2.00	ppm	2017	No	Water additive used to control microbes.
Chlorine (EP 103)	1.0	1.02	1.00 – 1.80	ppm	2017	No	Water additive used to control microbes.
Chlorine (EP 108)	0.4	0.01	0.03 – 3.29	ppm	2017	No	Water additive used to control microbes.



DEFINITIONS

AL	<i>Action Level</i>	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MCL	<i>Maximum Contaminant Level</i>	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.
MCLG	<i>Maximum Contaminant Level Goal</i>	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.
MRDL	<i>Maximum Residual Disinfectant Level</i>	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.
MRDLG	<i>Minimum Residual Disinfectant Level Goal</i>	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.
MinRDL	<i>Minimum Residual Disinfectant Level</i>	The minimum level of residual disinfectant required at the entry point to the distribution system.
pCi/l	<i>Picocuries per liter</i>	A unit measurement of radioactivity
ppb	<i>Parts per billion</i>	A unit measurement. The same as micrograms per liter (ug/L)
ppm	<i>Parts per million</i>	A unit measurement. The same as milligrams per liter (mg/L)
TT	<i>Treatment Technique</i>	A required process intended to reduce the level of a contaminant in drinking water.



WATER HARDNESS, PH & OTHER USEFUL INFORMATION

Secondary contaminants are associated with the aesthetic qualities of drinking water, such as taste, smell, color and formation of deposits on plumbing fixtures. When a secondary contaminant MCL is exceeded, you may notice a change in the color, smell or taste of your tap water. Below are some of the more common contaminants that may be found in tap water. We are glad to report that no MCL's have been exceeded for these parameters. All results were obtained in 2017.

Contaminant Name	MCL	Your Water – Average Results
pH	<6.5 – >8.5	7.3
Iron (ppm)	0.3	<0.16
Sodium (ppm)	N/A	7.7
Sulfate (ppm)	250	27.1
Total Dissolved Solids (ppm)	500	203
Calcium (ppm)	N/A	40.0
Total Hardness (grains per gallon)*	N/A	5.2– 10.6*
Zinc (ppm)	5	<0.17

*Range reflects the different water supplies that may be in use in this system at any time.

WATER SOFTENER REFERENCE CHART



Hardness Scale:

0 – 5 grains per gallon	= Soft Water
6 – 10 grains per gallon	= Moderately Hard Water
>11 grains per gallon	= Hard Water



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 would like more information about these results, please call us at (610) 694-8680 or contact the State Drinking Water office at (570) 826-2511. The information below is required language mandated by PADEP.

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. Environmental Protection Agency and Centers for Disease Control 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).



INFORMATION ABOUT LEAD

Lead contamination in water has been a hot topic in the news recently but be assured that Upper Saucon Township has followed required State and Federal testing requirements and our water supplies show no exceedances of lead levels in your drinking water. If present, however, 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>.

TAP WATER: IT'S REFRESHING. IT'S CONVENIENT. IT'S... close

YOU CAN FILL 1500 GLASSES OF TAP WATER

FOR THE PRICE OF ONE PLASTIC BOTTLE

VIRTUALLY FREE!

DRINK TAP WATER

AND SAVE YOURSELF HUNDREDS OF DOLLARS ON PLASTIC BOTTLES

GET IN THE HABIT OF ALWAYS CARRYING A REFILLABLE BOTTLE

FOR MORE ON TAP WATER ADVANTAGES AND FREE REFILL LOCATIONS, JUST

askHRgreen.org

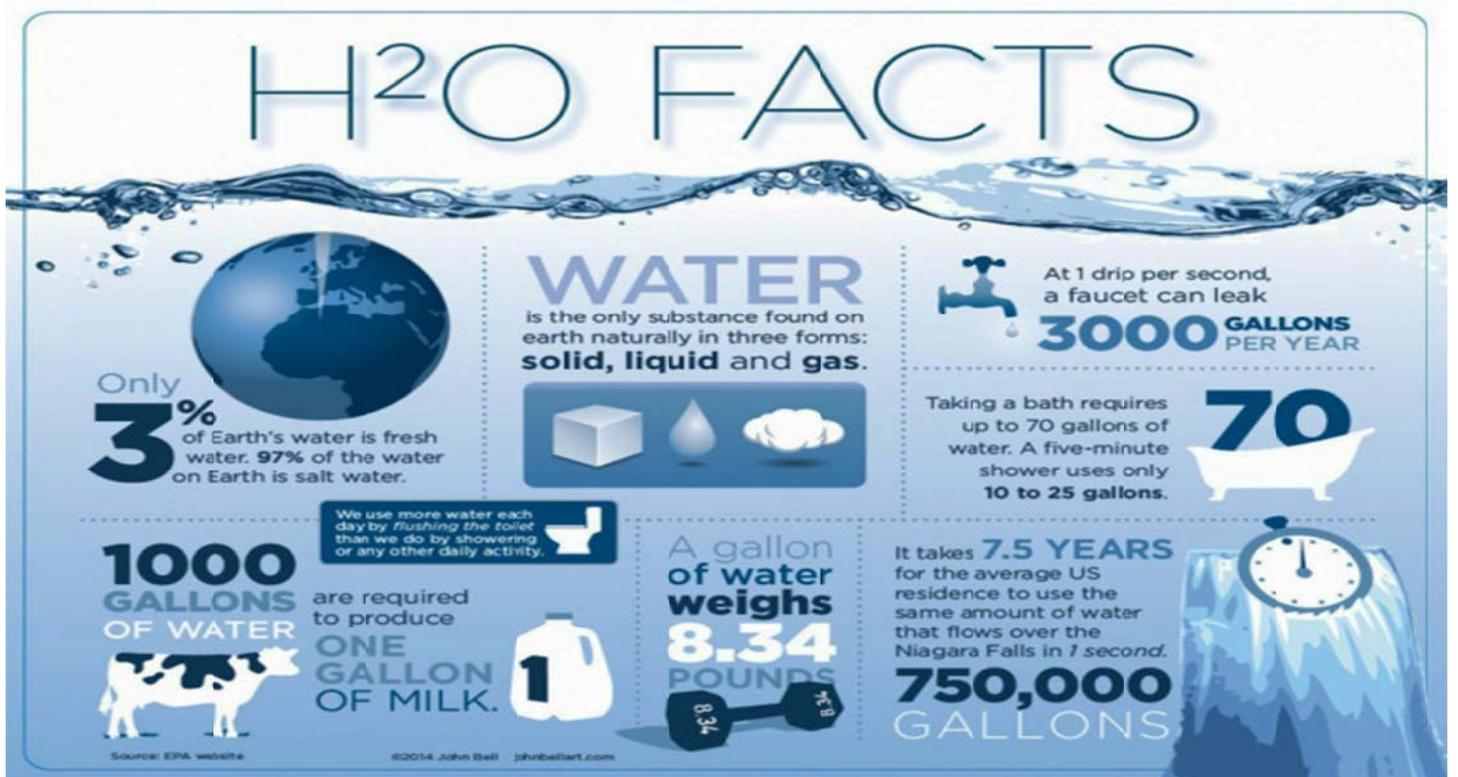


EDUCATIONAL INFORMATION

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:

-  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.
-  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.
-  Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
-  Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater run-off and residential uses.
-  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).



H₂O FACTS

Only 3% of Earth's water is fresh water. 97% of the water on Earth is salt water.

WATER is the only substance found on earth naturally in three forms: **solid, liquid and gas.**

At 1 drip per second, a faucet can leak **3000 GALLONS PER YEAR**.

Taking a bath requires up to 70 gallons of water. A five-minute shower uses only **10 to 25 gallons.**

We use more water each day by flushing the toilet than we do by showering or any other daily activity.

1000 GALLONS OF WATER are required to produce **ONE GALLON OF MILK.**

A gallon of water weighs **8.34 POUNDS**.

It takes **7.5 YEARS** for the average US residence to use the same amount of water that flows over the Niagara Falls in 7 second. **750,000 GALLONS**

Source: EPA website ©2014 John Bell jbellart.com