



2017 Borough of Phoenixville Water Quality Report, PWSID# 1150077

*Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo ó hable con alguien que lo entienda bien.*

About Your Drinking Water

Phoenixville Water Department (public water supply ID-1150077) is pleased to provide you with its 2017 Consumer Confidence Report, which contains important information about your drinking water. The report summarizes the quality of water provided in 2017 - including details about water source, what the water at your tap contains, and how it compares to standards set by regulatory agencies. Although the report lists only those regulated substances that were detected in your water, we test for more than what is reported.

This report is only a summary of our testing during 2017. If you have any questions about the information in this report, please call E. Jean Krack, Borough Manager, at 610-933-8801.

Sources of Supply

Water for the Borough of Phoenixville comes from the Schuylkill River, a surface water supply. The Borough takes water from the Schuylkill through two intakes at the main plant. A Source Water Assessment for the Schuylkill River was completed in 2002 by the Pennsylvania Department of Environmental Protection (DEP). The source overall has a moderate risk of significant contamination. The Assessment found that this source is potentially susceptible to spills, failing septic systems, wastewater lift station and collector overflows, runoff from roads and parking lots, and waterfowl. The Schuylkill River is susceptible to the effects of acid mine drainage in the upper watershed. Information on source water assessments is available on the DEP Web site at www.depweb.state.pa.us (DEP keyword "source water"). Complete reports were distributed to municipalities, water suppliers, local planning agencies, and DEP offices. Copies of the complete report are available for review at the DEP Southeast Regional Office, Records Management Unit (484-250-5900).

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 radioactive material, and can pick up substances resulting from the presence of animals or from 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 storm runoff, 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, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff 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 ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 800-426-4791.

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Phoenixville Water Department, PWSID # 1150077

The following table lists contaminants that were detected in your water system. The table provides the average of the sources used to supply the Borough as well as minimum and maximum observed levels of regulated contaminants.

Contaminants	Average Detection	Range of Detections	MCL	MCLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
Turbidity, % meeting plant performance level	100%	100 - 100%	TT	NA	2017	N	Soil runoff
Inorganic Contaminants							
Barium, ppm	0.04	NA	2	2	2017	N	Erosion of natural deposits
Chromium, ppb	1.6	NA	100	100	2017	N	
Fluoride, ppm	0.5	0.1 - 0.8	2	2	2017	N	Water additive which promotes strong teeth
Nitrate, ppm	2.3	NA	10	10	2017	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radiological Contaminants							
Gross Beta, pCi/L	2.1	ND - 4.3	50 (a)	0	2017	N	Decay of natural and man-made deposits
a) The MCL for beta particles is 4 millirems per year (a measure of radiation absorbed by the body). EPA considers 50 pCi/L to be a level of concern for beta particles.							
Disinfectant and Disinfection Byproducts							
Chloramines, ppm	1.4	0.9 - 1.9	MRDL = 4	MRDLG = 4	2017	N	Water additive used to control microbes
Haloacetic acids, ppb	21	ND - 37	60	NA	2017	N	Byproduct of drinking water chlorination
Total Trihalomethanes, ppb	46	14 - 68	80	NA	2017	N	

Contaminants	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Violation Y/N	Major Sources in Drinking Water
Entry Point Disinfectant Residual - PA Rule: This rule requires that no station operate below specific minimum free chlorine levels for more than 4 hours.						

Chlorine, ppm	0.58	1.6	1.6 – 3.9	2017	N	Water additive used to control microbes
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Lead and Copper	90th Percentile	Total Number of Samples	Samples Exceeding Action Level	Action Level	MCLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
Copper, ppm	0.22	30	0	1.3	1.3	2016	N	Corrosion of household plumbing
Lead, ppb	2.5	30	0	15	0	2016	N	

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. The Borough of Phoenixville 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>.

Phoenixville Water Department, PWSID # 1150077

Total Organic Carbon (TOC)						
Contaminant	Range of % Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sample Date	Sources of Contamination
TOC	25 - 35	20.0 – 54.7	0	N	2017	Naturally present in the environment

The required range of recommended percentage of removal was not met. This was due to treatment techniques not reaching optimization. Cryptosporidium is a microbial parasite found in waters throughout the United States. During 2017 monitoring of the raw surface water source (prior to treatment), Cryptosporidium was detected at an average concentration of 0.015 per liter. Samples were collected monthly throughout 2017 from the raw water supply (Schuylkill River) and had a range of concentrations of Not Detected to 0.089 per liter. The average concentration of Cryptosporidium places the results in "Bin 1," which is the lowest category of risk from Cryptosporidium.

The 1996 amendments to the Safe Drinking Water Act (SDWA) require that once every five years, the U.S. Environmental Protection Agency (EPA) issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The Unregulated Contaminant Monitoring Rule (UCMR) provides EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. These data serve as a primary source of occurrence and exposure information that the agency uses to develop regulatory decisions. If a PWS monitoring for UCMR3 finds contaminants in its drinking water, it must provide the information to its customers in this annual water quality report. Below is a table of the results of our UCMR3 monitoring in 2013 and 2014. All other contaminants tested during UCMR3 were Not Detected.

Unregulated Contaminants Detected During 2013 and 2014.			
Unregulated Contaminant	Average Detection	Range of Detections	MCL
1,4-Dioxane, ppb	0.022	ND – 0.087	NA
Chlorate, ppb	94	ND - 265	NA
Chromium, ppb	0.44	0.34 – 0.51	NA
Hexavalent chromium, ppb	0.29	0.22 – 0.35	NA
Molybdenum, ppb	1.5	ND – 3.4	NA
Strontium, ppb	166	134 - 224	NA
Vanadium, ppb	0.13	ND – 0.33	NA

Violations: The following is a list of Monitoring / Reporting violations. Samples were collected on-time, but results were reported to PADEP late. The Borough of Phoenixville has taken corrective actions to help ensure these types of violations are not repeated in the future. There was no impact on the quality of the water. There is no action you need to take as a result of these reporting violations.

Contaminant	Contam. ID	Viol. ID	Explanation
2,3,7,8-tcdd (dioxin) (SOC)	2063	FY17 33680	The Q3 2017 sample collected on 09/22/2017 was reported late on 10/19/2017. It was due on 10/10/2017.
gross beta particle activity	4100	FY17 38010	The Q3 2017 sample collected on 09/20/2017 was reported late on 10/12/2017. It was due on 10/10/2017.
chlorine	0999	FY17 33681	The September 2017 daily entry point chlorine samples were reported late on 10/11/2017. It was due on 10/10/2017.
turbidity	0100	FY17 33683	September 2017 individual filter effluent (IFE) samples were reported late on 10/11/2017. It was due on 10/10/2017.
total alkalinity	1927	FY17 37936	September 2017 raw sample (09/19/2017) was reported late on 10/11/2017. It was due on 10/10/2017.
turbidity	0100	FY17 33682	September 2017 combined filter effluent (CFE) samples were reported late on 10/11/2017. It was due on 10/10/2017.
total alkalinity	1927	FY18 09757	December 2017 raw sample collected on 12/11/2017 was reported late on 02/05/2018. It was due on 01/10/2018.

Notes:

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

Fluoride: Fluoride may help prevent tooth decay if administered properly to children, but can be harmful in excess. Customers in the Borough receive water from a fluoridated supply. This information may be helpful to you, your pediatrician or your dentist in determining whether fluoride supplements or treatment are appropriate.

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. Some levels are based on a running annual average.

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.

NA: Not applicable.

ND: Not detected.

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 advice from your health care provider.

NTU: Nephelometric turbidity unit (cloudiness of water). **ppb:** A unit of concentration equal to one part per billion. **ppm:** A unit of concentration equal to one part per million. **PWSID:** Public water supply identification number.

Turbidity: Monitored as a measure of treatment efficiency for removal of particles. Plant Performance Level: 0.3 NTU.

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