

Borough of Sharpsville

Annual Drinking Water Quality Report

2016 Calendar Year Data

PWS ID 6430055

Prepared May 2017

We are pleased to present to you this year's **Annual Drinking Water Quality Report** (*Este informe contiene informacion muy importante sobre su agua potable. Tradazcalo 6 hable con alguien que lo entienda bien.*) This report is designed to inform you about the quality of water and services that 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 quality of your water and to protect our water resources.

The Borough of Sharpsville purchases bulk water from Aqua Pennsylvania's Shenango Valley Division (Aqua). Water for the Shenango Valley Division comes from the Shenango River, which is fed by a 650-square mile watershed located north of Sharon, Pennsylvania. A Source Water Assessment for the Shenango River was completed in 2003 by the Pennsylvania Department of Environmental Protection (DEP). Information on source water assessment is available on the DEP Web site at www.dep.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 Northwest Regional Office, 814-332-6899.

MONITORING REQUIREMENTS

The Borough of Sharpsville routinely monitors for contaminants in your drinking water according to an Annual Monitoring Calendar provided by the PA Department of Environmental Protection. The table on the following page shows the results of our monitoring for the period of January 1 to December 31, 2016. The PADEP 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, though representative, are more than one year old.

In order to ensure that tap water is safe to drink, the EPA has prescribed Maximum Contaminant Levels (MCLs) that limit the amount of certain contaminants in water provided by public water systems. MCLs 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 two 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.

The following tables compare those contaminants found to be present in the system's water with the MCL for that substance. If the contaminant exceeds the MCL at any time, a violation is said to occur.

CLOSING

The Borough of Sharpsville would like to thank you for allowing us to provide your family or business with clean, quality water. In order to maintain a dependable water supply we sometimes need to make improvements that will benefit all of our customers. The Borough's endeavors to make improvements to the water distribution system are ongoing and continue at a regular basis. These improvements will be reflected as rate adjustments. We appreciate your understanding and cooperation.

If you have questions about this report or concerns about your water utility, please contact Ken Robertson, Sharpsville Borough Manager at (724) 962-7896 between the hours of 8:00 AM and 4:00 PM Monday thru Friday.

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 meetings. They are held on the second Wednesday of each month (unless publicly posted otherwise) at 7:00 p.m. at the Borough Municipal Building located at 1 South Walnut Street.

Thank you!

The Borough of Sharpsville


2016 ANNUAL DRINKING WATER QUALITY REPORT

 PWSID #: 6430055 NAME: Borough of Sharpville

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó 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 about this report or concerning your water utility, please contact Ken Robertson, Sharpville Borough at (724)962-7896. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the second Wednesday of every month at 7:00 PM at the Borough Building located at 1 South Walnut Street.

SOURCE(S) OF WATER:

Our water source(s) is/are: (Name-Type-Location)

Our water source is the Shenango River. The Borough of Sharpville purchases bulk water from Aqua Pennsylvania's Shenango Valley Division (Aqua). Water for the Shenango Valley Division comes from the Shenango River, which is fed by the 650 square mile watershed located north of Sharon, Pennsylvania.

A Source Water Assessment of our source(s) was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our source(s) is potentially most susceptible transportation corridors, railroads and bridges, boating, utility substations, power plants, auto repair shops, stormwater runoff, and package plants/wastewater treatment plants. Overall, our source has little to moderate risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP Northwest Regional Office, Records Management Unit at (814) 332-6899.

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).

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 of January 1 to December 31, 2016. 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.

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.

Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

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 ($\mu\text{g/L}$)

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								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Turbidity (Aqua)	TT ≤ 0	N/A	0.24	0.03-0.24	NTU	2016	N	Soil Runoff
Chlorine-Distribution System	MRDL=4	MRDLG=4	1.85	1.1-1.85	ppm	2016	N	Water additive used to control microbes.
Arsenic (Aqua)	10	0	0.01	0.01	ppb	July 18, 2016	N	Erosion of natural deposit. Runoff from orchards, runoff from glass and electronics production wastes.
Barium (Aqua)	2	2	0.017	0.017	ppb	July 18, 2016	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium (Aqua)	100	100	2.1	2.1	ppb	July 18, 2016	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride (Aqua)	2	2	0.84	0.84	ppm	July 18, 2016	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
HAA5	60	N/A	29.3	12.5-61.21	ppb	2016	N	By-product of drinking water disinfection.
TTHM	80	N/A	48.1	23.6-82.8	ppb	2016	N	By-product of drinking water disinfection.

*EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Total Chlorine Entry Point (Aqua)	0.2	0.19	0.19-4.21	ppm	2016	N	Water additive used to control microbes.

Lead and Copper							
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	3.5	ppb	0	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.17	ppm	0	N	Corrosion of household plumbing.

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminants	TT	MCLG	Assessments/ Corrective Actions	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Naturally present in the environment.

Microbial (related to E. coli)					
Contaminants	MCL	MCLG	Positive Sample(s)	Violation Y/N	Sources of Contamination
<i>E. coli</i>	Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .	0	0	N	Human and animal fecal waste.

Turbidity						
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination
Turbidity	TT=1 NTU for a single measurement	0			N	Soil runoff
	TT= at least 95% of monthly samples ≤ 0.3 NTU				N	

Total Organic Carbon (TOC)					
Contaminant	Range of % Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination
TOC	35-45	60-73	0	N	Naturally present in the environment

DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:

No violations took place. As such, no health effects are noted.

OTHER VIOLATIONS:

The Borough of Sharpville had no other 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 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 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 runoff, 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 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 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 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. The Borough of Sharpsville 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:

Monitoring for Cryptosporidium (a naturally occurring microbial pathogen) was conducted under a national program in 2009 on raw (untreated) water samples from our source, the Shenango River. Cryptosporidium was detected in 3 of 24 raw water samples, with an average count of 0.027 oocysts per liter. These levels are in the lowest category of risk for raw (untreated) water. Aqua's water treatment processes are designed to remove Cryptosporidium, but complete removal of all organisms at all times cannot be guaranteed. For this reason, immune-compromised individuals (people with weakened immune systems) are encouraged to consult their doctor regarding appropriate precautions to avoid infection.

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 UCMR 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 Aqua PA's UCMR monitoring in 2013. All other contaminants tested during UCMR were Not Detected.

<i>Unregulated Contaminants Detected During 2013</i>			
<i>Unregulated Contaminant</i>	<i>Average Detection</i>	<i>Range of Detections</i>	<i>MCL</i>
Hexavalent chromium, ppb	0.07	ND – 0.12	N/A
Strontium, ppb	71	63-79	N/A
Vanadium, ppb	0.11	ND – 0.22	N/A