

Borough of Sharpsville

Annual Drinking Water Quality Report

2006 Calendar Year Data

PWS ID 6430055

Prepared June 2007

We are pleased to present to you this year's **Annual Drinking Water Quality Report**. (*Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó 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 provides water to its customers from their water treatment plant located along the Shenango River. The water source intake is located approximately one mile downstream from the Shenango Reservoir dam.

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 1st to December 31st, 2006. 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 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.

The following table compares 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 is currently planning significant improvements to the water treatment plant to meet future regulations and 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 Mike Wilson, 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

2006 Water Quality Report
Borough of Sharpville (PWSID 6430055)

Contaminant Name	Highest Level Allowed (MCL)	Treatment Goal (MCLG)	Highest Level Detected	Range of Detection	Sources of Contaminants In Drinking Water	Violations
Microbiological						
Turbidity	TT-95% of monthly samples □ 0.3 NTU	0	0.09 NTU Lowest monthly % = 100 %	0.02 - 0.09 NTU	Naturally present in the environment.	None
Inorganic Contaminants						
Barium (2004 data)	2 ppm	2 ppm	0.02 ppm	N/A	Erosion of natural deposits. Discharge from metal refineries. Discharge of drilling wastes.	None
Fluoride (2004 data)	2 ppm	2 ppm	0.70 ppm	N/A	Erosion of natural deposits. Water additive which promotes strong teeth.	None
Nitrate	10 ppm	10 ppm	0.24 ppm	N/A	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks, sewage.	None
Lead and Copper Rule						
Lead (2004 data)	15 ppb Action Level 1.3 ppm	0 ppb	90th percentile = 2.0 ppb	0 - 3.0 ppb No AL exceedences 0 - 0.3 ppm	Corrosion of household plumbing systems. Erosion of natural deposits. Corrosion of household plumbing systems.	None
Copper (2004 data)	1.3 ppm Action Level	1.3 ppm	90th percentile = 0.05 ppm	No AL exceedences	Erosion of natural deposits.	None
Disinfection Byproducts (DPBs), Byproduct Precursors and Disinfectant Residuals						
Total Trihalomethanes (TTHMs)	80 ppb	N/A	Highest Running Annual Average = 109.9 ppb	49.4 - 160.0 ppb	By-product of drinking water chlorination.	Yes
Halogenated Acetic Acids (HAAs)	60 ppb	N/A	Highest Running Annual Average = 81.3 ppb	50.0 - 96.0 ppb	By-product of drinking water chlorination.	Yes
Total Organic Carbon (TOC)	TT	N/A	Alternative Compliance Criteria No.4 RAA of SUVA < 2.0 L/mg-m	N/A	Naturally prevent in environment	None
Chlorine	MRDL = 4 ppm	MRDLG = 4 ppm	Lowest entry point value = 0.3 ppm Highest distribution system monthly average = 1.18 ppm	Entry point range - 0.3 - 2.2 ppm Distribution system monthly average range - 0.64 - 1.18 ppm	Drinking water additive used to control microbes.	None
Radionuclides						
Gross Alpha (2005 data)	15 pCi/L	0 pCi/L	4.22 pCi/L	0 - 4.22 pCi/L	Erosion of natural deposits.	None

Definitions:
 NTU - Nephelometric Turbidity Unit is a measure of the cloudiness of the water. The Borough monitors turbidity because it is a good indicator of the effectiveness of the filtration system.
 TT - Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.
 MCL - Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goals as feasible using best available technology.
 MCLG - Maximum Contaminant Level Goal - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
 MRDLG - Maximum Residual Disinfectant Level Goal - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that disinfectants are necessary for control of microbial contaminants.
 MRDL - Maximum Residual Disinfectant Level - The level of a drinking water disinfectant below which there is no known or expected risk to health. (MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.)
 Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
 SUVA - Specific Ultraviolet Absorbance
 ppm - One part per million. Comparable to one milligram per liter (1 mg/L). Corresponds to one minute in two years or a single penny in \$10,000.
 ppb - One part per billion. Comparable to one microgram per liter (1 ug/L). Corresponds to one minute in 2000 years or a single penny in \$10,000,000.
 pCi/L - Pico-curies per liter, a measure of the radioactivity in water.
 N/A - Not applicable.

HEALTH INFORMATION

All sources of drinking water (both tap and bottled), which include rivers, lakes, streams, ponds, reservoirs, springs and wells, are subject to potential contaminants that are naturally occurring or man made. 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. Those contaminants that may be present in source water include:

- **Microbiological Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Radioactive Contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or refining.
- **Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential use.
- **Organic Chemical Contaminants**, including synthetic and volatile chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

A source water assessment of the Borough's source was completed in 2003 by the PA Department of Environmental Protection (PADEP). The assessment found that the source has little risk of significant contamination. Summary reports of the Assessment are available on the PADEP website at www.dep.state.pa.us (Keyword: "DEP source water"). Complete reports were distributed to municipalities, water supplier, local planning agencies and the PADEP offices. Copies of the complete report are available for review at the PADEP Northwest Regional Office, Records Management Unit at 814-332-6899.

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.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose 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 or by referring to their website at <http://www.epa.gov/safewater>.

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 from their health care providers about drinking water. 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 (1-800-426-4791).

The Borough exceeded the MCL for Total Trihalomethanes (TTHMs) in the last two quarters of 2006 and the MCL for Haloacetic Acids (HAAs) in all four quarters. The Borough has also exceeded the MCLs for TTHMs, HAAs, Total Organic Carbon (TOC) and Specific Ultraviolet Absorbance (SUVA) for the first and second quarters of 2007. The running annual averages were 110.8 ppb, 75.3 ppb, 4.3 mg/l and 2.04 L/mg-m for TTHMs, HAAs, TOC and SUVA, respectively in the first quarter and 94.5 ppb, 75.3 ppb, 4.4 mg/l and 2.14 L/mg-m for TTHMs, HAAs, TOC and SUVA, respectively in the second quarter. These exceedences are caused by the high level of natural organics found in the Shenango River water source. The organic precursors have no health effects; however, drinking water containing TTHMs and HAAs in excess of the MCL over many years may lead to adverse health effects, liver or kidney problems, or nervous system effects, and it may lead to an increased risk of getting cancer. The Borough is currently planning to construct improvements at their water treatment facility to resolve these violations and to meet future drinking water regulations.