

2010 ANNUAL DRINKING WATER QUALITY REPORT
Borough of Zelienople PWSID # 5100093

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 the water system superintendent at 724-452-6613 ext. 400 or zeliewater@zoominternet.net. 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 2nd and last Monday of the month at 7:30p.m. at the Municipal Building.

SOURCES OF WATER:

Our primary source of water during the calendar year was Scholar's Run, a tributary of the Connoquenessing Creek, located in Jackson Twp. A *Source Water Assessment* of this source was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our source of is potentially most susceptible to road deicing materials, accidental spill along roadways and leaks of underground storage tanks. Overall, this source has a moderate risk of significant contamination. A summary report of the Assessment is available on the *Source Water Assessment & Protection Web* page at (<http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm>). 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) 332-6816.

On December 13, 2010, Zelienople Borough discontinued treating water at the Zelienople Filtration Facility and began purchasing all of the Borough's drinking water from the Beaver Falls Municipal Authority. The source of this water is the Beaver River, a confluence of the Mahoning and Shenango Rivers near New Castle. Information about the water quality for the Beaver Falls Municipal Authority can be found at www.bfwater.net. A copy of the 2010 Water Quality Report for Beaver Falls Municipal Authority is also available at the Zelienople Municipal Building or on our website at www.zelieboro.org

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 31,2010. 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.

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

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

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

DETECTED SAMPLE RESULTS: Zelenople Borough Filtration Plant

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	0.9	0.3-0.9	ppm	4/09	N	Runoff from fertilizer use
HAA5	60	NA	18.71	13.1 – 23.2	ppb	2010	N	By-product of drinking water disinfection
TTHM	80	NA	66.43	34.3 – 94.35	ppb	2010	Y	By-product of drinking water chlorination

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.2	0.48b	0.48-1.89	ppm	08/10	N	Water additive used to control microbes.

Lead and Copper							
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	<0.005a	ppb	1	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.8	ppb	0	N	Corrosion of household plumbing.

Turbidity							
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination	
Turbidity	TT=1 NTU for a single measurement	0	1.48	10/09/10	N	Soil runoff.	
	TT= at least 95% of monthly samples ≤ 0.3 NTU		99.9%	10/10	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	25%-35%	32%-47%	0	N	Naturally present in the environment.

(a) These are 90th percentile results. One of the twenty samples for lead exceeded the minimum action level for lead.

(b) DEP regulations require that a 'detectable' amount of disinfectant be maintained in the distribution system

HEALTH EFFECTS: Some people who drink water containing trihalomethanes (TTHM) in excess of the MCL over many years

may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

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 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, 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 Zelienople 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>.

Improvements to the water system

2010 brought major changes to the water supply and distribution system. In December 2010, as part of the overall water plan the Borough announced to the public, we decommissioned the Zelienople Water Filtration Facility and began to purchase water from Beaver Falls Municipal Authority. Prior to serving Zelienople Borough, the TTHM limits were exceeded by Beaver Falls Municipal Authority and the 4th quarter sample for VOC's was not collected and rescheduled for February 2011. Two new 1 million gallon water storage tanks were completed and placed into service providing more water for fire protection and increasing pressure to our low pressure zones. A new water line along Perry Way replaced aging infrastructure, and improvements to the storm water system were also completed as part of the construction project. 2010 was a major step forward in the improvement of water supply to the customers of our water system. Additional improvements will be made in 2011 and 2012 as planned.