

BEAVER BOROUGH

PWSID# 5040009

2010 ANNUAL DRINKING WATER QUALITY REPORT

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, 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 Borough Office at 469 Third Street, Beaver, PA 15009.

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 on the second Tuesday of each month at 7:30 P.M. in the Municipal Building at 469 Third Street, Beaver, PA 15009.

SOURCE OF WATER:

Our water source is five (5) wells located by the riverfront.

The PA Department of Environmental Protection (PADEP) completed a Source Water Assessment of our source in 2003. The Assessment has found that our source is potentially most susceptible to accidental spills from roadways, railroad, and a nearby fuel storage facility. Overall, our source has moderate risk of significant contamination. Summary reports of the Assessment are available by writing to Beaver Borough at 469 Third Street, Beaver, PA 15009, and will be 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 PADEP offices. Copies of the complete report are available for review at the PADEP Southwest Regional Office, Records Management Unit at (412-442-4000).

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 AND ABBREVIATIONS:

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

MCL = Maximum Contaminant Level - 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 = Maximum Contaminant Level Goal - 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 = Maximum Residual Disinfectant Level - 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 = Maximum Residual Disinfectant Level Goal - 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.

pCi/L = Picocuries Per Liter - a measure of radioactivity.

ppm = Parts Per Million = milligrams per liter (mg/L)

ppb = Parts Per Billion = micrograms per liter (µg/L)

DETECTED SAMPLE RESULTS:

Chemical Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	MRDL 4	MRDL 4	0.98	0.57-0.98	ppm	Monthly	N	Water additive used to control microbes
Haloacetic Acids	60	n/a	6.8	*	ppb	08/05/08	N	By-product of drinking water disinfection
Nitrate	10	10	3.65	0.55 – 3.65	ppm	03/09/10 09/27/10	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion or natural deposits
TTHMs (Total trihalomethanes)	80	n/a	68.6	*	ppb	08/05/08	N	By-product of drinking water chlorination
Gross Alpha	15	0	4.08	0.0 – 4.08	pCi/L	06/13/06 08/23/06	N	Erosion of natural deposits

- Only one sample required

Contaminant	Action Level AL	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of AL Y/N	Sources of Contamination
Lead (samples taken in 2010)	15	0	11.2	ppb	2 out of 20	N	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (samples taken in 2010)	1.3	1.3	0.27	ppm	0 out of 20	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Violation Information:

We failed to report our chlorine sample results for the month of April 2010 in a timely manner. They were supposed to have been reported by May 10, 2010, but we did not report them until May 17th... The samples were taken, just not reported on time.

EDUCATIONAL INFORMATION:

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 for advice from your health care provider.

Lead: Infants and young children are typically more vulnerable to lead in drinking water than the general population and could experience delays in their physical or mental development. Adults who drink this water over many years could develop kidney problems or high blood pressure. It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's water. You may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Beaver Borough provides safe clean potable water that meets all Federal and State requirements. We are pleased to inform you that there is no lead present in the water we provide. Lead in drinking water is primarily from materials and components associated with the service lines and home plumbing. Beaver Borough 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 present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>. This announcement is one of many requirements from the EPA and PA DEP to help you better understand the role water plays in your everyday life.

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 storm water 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 storm water 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 storm water runoff, and septic systems.
- Radioactive contaminants, which can exist naturally 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).

You might have noticed a little more chlorine in your drinking water than in the past. EPA recently established a rule that requires drinking water systems using groundwater to achieve 99.99% inactivation of viruses through the disinfection process. Inactivation is a function of the disinfectant (chlorine) concentration and the amount of time the water spends in contact with the disinfectant, as well as the temperature and pH of the water. DEP established a minimum residual concentration of 0.4 mg/l as free chlorine. In order to achieve this concentration, we regrettably have to add a little more chlorine than we have in the past.