

## Tap Water vs. Bottled Water

Thanks in part to aggressive marketing; the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water.

For a detailed discussion on the NRDC study results visit their Web site at: [www.nrdc.org/water/drinking/bw/exesum.asp](http://www.nrdc.org/water/drinking/bw/exesum.asp)

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 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial process and petroleum production and mining activities.
- 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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. 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 the 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 at 1-800-426-4791.

### Protect Our Water Source

Thank you for allowing us to continue providing your family with clean, quality water this year. We work around the clock to provide top quality water to every tap. We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.



# WATER QUALITY REPORT

## 2010

PWS ID#: 6430040

Borough  
Of  
**Grove City**  
PENNSYLVANIA

**123 West Main Street**  
**PO Box 110**  
**16127**

## Continuing Our Commitment to Our Residents

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak to someone who understands it.)

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2010. Over the years we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

## Important Health Information

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. The US EPA/CDC (Centers for Disease Con-

trol and Prevention) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are 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 and cooking. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure can be found at the Safe Drinking Water Hotline 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

If present nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 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.

## Our Water Source

The Borough of Grove City customers are fortunate because we enjoy an abundant water supply from three ground water well sources. The wells draw from the Homewood sandstone, the upper and lower Connoquessing sandstone and the Burgoon sandstone formations.

## Source Water Assessment

A Source Water Assessment of our source water was completed in 2004 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our source is potentially most susceptible to former and active industrial sites, previous coal mining, and leaks in underground storage tanks. Overall, our source has little risk of significant contamination. Summary reports of the Assessment are available by writing to The Borough Manager, P.O. Box 110 Grove City, Pa. 16127 and will be available on the PADEP website at [www.dep.state.pa.us](http://www.dep.state.pa.us) (Keyword: "DEP source water").

Complete reports were distributed to municipalities, water suppliers, local planning agencies, and PADEP offices. Copies of the complete report are available for review at the PADEP Meadville Regional Office, Records Management Unit at 814-332-6942.

## Community Participation

We want you to be informed so if you have any questions about this report or concerning your water utility please contact the Water Treatment Plant Superintendent at 724-458-9440 or The Borough Manager, Borough of Grove City, 123 West Main Street, PO Box 110, Grove City, PA 16127 or call 724-458-7060. Also our regularly scheduled council meetings are the third Monday of each month at 7:00 pm in the Borough Building.

## Definitions and Abbreviations

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

**90<sup>th</sup> Percentile:** Out of every 10 homes sampled, 9 were at or below this level.

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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 the drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Of TT Y/N	Sources of Contamination
Lead 2010	15	0	0.000	ppb	0	No	Corrosion of household plumbing
Copper 2010	1.3	1.3	0.46	ppm	0	No	Corrosion of household plumbing
Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Range of Detects	Units	Violation Y/N	Sources of Contamination
Alpha Emitters Year 2005	15	0	0.5171	0-0.517	pCi/l	No	Erosion of natural deposits
Nitrate Year 2010	10	10	0.23	0-0.23	ppm	No	Runoff from fertilizer use; Leaching from septic tanks; sewage; erosion of natural deposits
Chemical Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Range of Detects	Units	Violation Y/N	Sources of Contamination
TTHM's	80	n/a	6.8	5.8-6.8	ppb	No	By-product of drinking water chlorination
Trihalomethanes	60	n/a	1.2	1.2-1.2	ppb	No	
Distribution	MCL in CCR units	MCLG	Highest Level Detected	Range of Detects	Units	Violation Y/N	Sources of Contamination
Chlorine 2009	4	4	1.227	0.891-1.227	ppm	No	Water additive used to control microbes

**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 disinfect to control microbial contaminants.

**Treatment Technique (IT):** A treatment technique is 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. (ug/L)

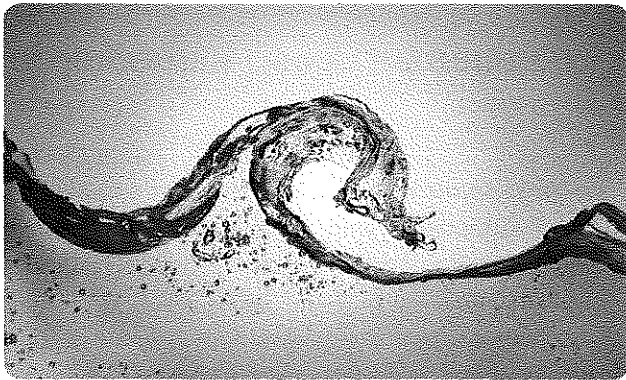
**ppm =** parts per million, or milligrams per liter. (mg/L)

**ppq =** parts per quadrillion, or picograms per liter.

**Ppt =** parts per trillion, or nanograms per liter.

## Sampling Results

During the past year we have taken water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table above shows only those contaminants that were detected in the water. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.



## Naturally Occurring Bacteria

The simple fact is, bacteria and other microorganisms inhabit our world. They can be found all around us: in our food, on our skin, in our bodies, and in the air, soil, and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacteria form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Last year we tested more than 208 samples (more than 9 samples per month) for coliform bacteria. All of our samples for 2010 tested negative for coliform bacteria.

## Our Future Commitment

To ensure that the Grove City area water supply is reliable and safe in the years to come, the Borough has made a financial commitment toward moving our source water location and upgrading our treatment facilities. Well head protection is very important to us and the future of Grove City. The Borough plans to relocate our water source to Memorial Park. This 214 acre park will secure a buffer zone around the source water that our residents can feel confident about and is a location that meets stringent well head protection requirements. The buffer zone around the well head helps to protect our source water from any surface pollution which might come from industry and even certain residential practices such as the application of lawn fertilizers, pesticides and herbicides. In the year 2010 the Borough drilled our first test well in Memorial Park with very good results. This year (2011) we will be drilling the first of two production wells that will serve our community in the future. In a few short years the Borough plans to complete the well drilling and permitting process, build the neces-

## Around Your Home Keep Fire Hydrants and Water Meters Accessible

Residents of the Borough are asked to help ensure there is easy access to fire hydrants and water meters located on their property. In the event of a fire it is crucial the emergency responders are able to identify and access fire hydrants. Easy access to your water meter enables the street department employees to preform repairs and provide routine maintenance in a quick and efficient manner.

## Does the Borough add Fluoride to the water?

Water Treatment at the Borough does not include any fluoride addition to the water. Our water does contain fluoride (0.2 mg/l) which occurs naturally from erosion of natural deposits. The Maximum Contaminate level for fluoride is 2 mg/l.

## The Garden Hose ... Enemy of safe drinking water?

Many water-related activities can pose a real risk to our drinking water supply. Consider this scenario:

sary transmission lines, and design and construct a new water treatment facility in Memorial Park. Our new facility will be constructed using the latest in water treatment technology and design and should serve our community well for decades to come. The Borough is sensitive to the difficulties our residents are facing during these uncertain economic times. For this reason we are approaching this project in smaller phases that can be accomplished over a period of years and helps to minimize the impact on our customers. While we strive to keep our user rates among the lowest in our county and area, we do find it necessary to implement a rate increase in the near future. Rates have not been increased since 2006 while our cost of operation has steadily increased. The decision to raise rates by the Borough is never taken lightly, and is always determined only after all other options have been considered. To maintain the financial health of the water department and achieve our goal of moving the source water location a modest rate increase is necessary. The Borough Council will be discussing and debating this topic during 2011.

It's a warm day and the children are playing in the pool in the back yard, you have the garden hose in the pool to keep adding cool water for the children. After an entertaining afternoon, you and the children go inside to enjoy an afternoon snack. The garden hose remains in the pool submerged in the water. A few blocks away, a water line breaks and the water pressure is lowered to the point that a vacuum is created in the water lines. As a result, the water in the pool is drawn back through your plumbing into the water distribution system. You've just contaminated the water supply! Don't let your garden hose be the connection between contaminants and our drinking water.

- Never submerge the end of a garden hose when filling a pool, a backyard garden pond, bucket, tub, sink or any other container.
- Never use a garden hose to connect to an underground or drip irrigation system to water your lawn and never connect your garden hose to a chemical lawn sprayer.