



Water Quality Report 2016

PWS ID# 6430040

Borough of

Grove City
PENNSYLVANIA

123 West Main Street
P.O. Box 110
16127

Continuing Our Commitment

To Our Residents

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo 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, 2016. 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 Control 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>.

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 upper and lower Connoquenessing sandstone and the Burgoon sandstone formations.

Sampling Results

During the past years we have taken water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows 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 micro-organisms 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 144 samples for coliform bacteria. All our samples for 2016 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 2011 and 2012 the Borough drilled two production wells in Memorial Park, both with excellent results. In 2017 the Borough will complete a Master Water Study to evaluate our water distribution infrastructure. Our new facilities will be constructed using the latest in water treatment technology and design and should serve our community well for decades to come.

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 Borough's employees to perform 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 (0.2mg/l) which occurs naturally from erosion of natural deposits. The Maximum Contaminate level for fluoride is 2mg/l.

Consuming Certain Beverages Will Dehydrate the Entire Body

Ever wonder what the actual water content is of some popular beverages? Coffee is somewhere around 98 to 99 percent water, soda is about 90

to 95 percent water and wine tends to range from 80 to 85 percent water. A light beer is close to 90 to 94 percent water, and tea is approximately 98 percent water. On the surface, based on the numbers, is it any surprise that the average person tends to think they have easily satisfied their body's daily crucial requirement for water? The 8 to 10 glasses of water that are often preached seems quite easy to attain given the water content of beverages like these. How many coffees and sodas are expended at the office each day? What about the after-work beer or wine relaxer? And when the thirst signal calls again, reaching for another soda seems to satisfy that desire, so it seems.

So what's the problem? It's about perception. People assume that because food and drink generally involve some percentage of water within its composition, that this now takes the place of consuming pure, unadulterated H₂O. It's not unusual to hear "well, my soda is mostly water and I've had several cans, so I'm already getting plenty of water every day." It's widely known that when the body sends out a thirst signal, it is already considered dehydrated. The lesson here is to drink plenty of pure water daily.

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:

90th 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 at 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.

Minimum Residual Disinfectant Level: The minimum level of residual disinfectant required at the entry point to the distribution system.

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.

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.

Treatment Technique (TT): 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 pictograms per liter.(pg/l)

ppt = parts per trillion, or nanograms per liter.(ng/l)

Table of Detected Contaminants 2016

Radionuclide	Violation	Units	MCL	MCLG	Highest Level Detected	Range of Detects	Sources of Contamination
Radium 228 (2014)	No	pCi/l	5	N/A	1.9	1.2-1.9	Breakdown of Uranium
Copper & Lead	Violation	Units	(AL)	MCLG	90th. Percentile Valve	# of Sites above AL	Sources of Contamination
Copper (2016)	No	ppm	1.3	1.3	0.32	0	Corrosion of
Lead (2016)	No	ppm	15	0	0	0	household plumbing
Nitrate & Nitrite	Violation	Units	MCL	MCLG	Highest Level Detected	Range of Detects	Sources of Contamination
Nitrate	No	ppm	10	10	0.18	0.18-0.18	Agricultural & fertilizer run
Nitrite	No	ppm	10	10	0	0	off and naturally occurring
Inorganics	Violation	Units	MCL	MCLG	Highest Level Detected	Range of Detects	Sources of Contamination
Barium(2015)	No	ppm	2	2	0.18	0.15-0.18	Metal that occurs naturally as Barite(Barium Sulfate)
Fluoride(2015)	No	ppm	4	4	0.32	0.25-0.32	Anion that occurs naturally as fluorite
Disinfection	Violation	Units	MRDL	MRDLG	Highest Level Detected	Range of Detects	Sources of Contamination
Chlorine	No	ppm	4	4	1.27	0.89-1.27	Water additives to control microbes
Entry Points			Minimum	Lowest Level Detected		Range	
Disinfection Residuals			Disinfection	and		of	
Chlorine	Violation	Units	Residual	Date of Lowest Detect		Detects	
Entry Point 101	No	ppm	0.4	0.47(4/24/2016)		0.47-1.42	
Entry Point 102	No	ppm	0.4	0.56(10/6/2016)		0.56-1.13	
Disinfection	Violation	Units	MCL	MCLG	Highest Level Detected	Range of Detects	Sources of Contamination
By-Products							
Haloacetic Acids	No	ppb	60	N/A	<u>Non-Detect</u>	<u>Non-Detect</u>	By-products of drinking
Trihalomethanes	No	ppb	80	N/A	30.8	12.5-30.8	water disinfection

***Non-Detect:** means that the sample result was less than the minimum detectable threshold for that approved testing method.

Unregulated Contaminant Monitoring Rule Program

The Borough of Grove City participated in a voluntary monitoring program conducted by the United States Environmental Protection Agency (USEPA) and received the results of that program on October 31, 2014. This monitoring program was designed to sample and test for unregulated contaminants in drinking water. Unregulated contaminants are those that do not yet have a drinking water standard set by the USEPA. The purpose of monitoring for these contaminants is to help the USEPA decide whether these contaminants should have a standard and therefore be regulated by the USEPA. Below is a table containing the unregulated contaminants that were detected in the water samples provided to the USEPA by The Borough of Grove City's water department. At this time there is no federal requirement to provide health effect information for these unregulated contaminants. For more information regarding this monitoring program please contact Cliff Torongeau at 724-458-9440.

Unregulated Contaminant Monitoring Rule Table

Contaminant	MCL in CCR units	MCLG	Average Level Detected	Range of Detects	Units	Violation Y/N	Sources of Contamination
Manganese	<u>50</u> * This is a Secondary MCL	N/A	19.3	7.6-44.3	ppb	N	Naturally occurring often in combination with iron
Strontium	N/A	N/A	233.1	190-286.4	ppb	N	Naturally occurs in minerals such as celestine and putnisite
Chlorate	N/A	N/A	124.2	67.4-170	ppb	N	Naturally occurring as part of the chlorine biochemistry cycle

- **Secondary MCLs regulate contaminant levels based on aesthetics such as color and odor, which do not pose a risk to health. These secondary maximum contaminant levels (SMCLs) are guidelines, not enforceable limits. They identify acceptable concentrations of contaminants which cause unpleasant tastes, odors, or colors in the water. SMCLs are for contaminants that will not cause adverse health effects.**

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 (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 regarding this report or concerns with 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, P.O. 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 7:00pm in the Borough Building.

Did You Know?

- * 30% of fresh water is in the ground and 68.7% is trapped in glaciers.
- * Approximately 400 billion gallons of water are used in the United States per day.
- * A leaky faucet that drips at a rate of one drip per second can waste more than 3,000 gallons per year.
- * Water use has grown more than twice the rate of population increase in the last century.

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 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.