



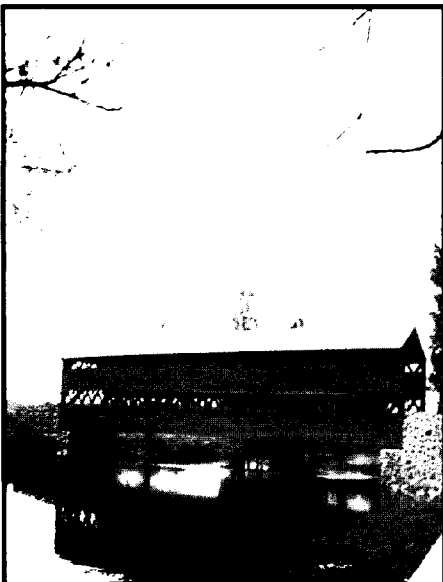
***2009 Annual Drinking Water Quality Report***  
*PWSID #7010019*

Please visit: [www.gettysburgma.com](http://www.gettysburgma.com)

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# Water



*Para nuestros clientes que hablan español:*

*Este reporte contiene importante información sobre la calidad del agua que tu tomas. Por favor llévale este reporte a alguien que te lo traduzca.*

We're pleased to present to you our Annual Drinking Water Quality Report. This report is designed to provide you, our customer, with information regarding the sources of your water, the operation of those sources, and their quality. 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 various water treatment processes and the efforts put forth to protect our water resources. **We are committed to ensuring the quality of your water.**

The water, which is delivered to you, is a combination of surface water and ground waters. The surface water is withdrawn from the Marsh Creek intake at the Sachs Mill Bridge. The ground water comes from six (6) active wells. Four wells are located in Cumberland Township, two wells are located in the Gettysburg Borough.

The surface water is treated at the Filtration Plant located near Sachs Mill Bridge. The plant is staffed by three (3) trained and State Certified Operators and qualified laboratory technicians. The ground waters receive various treatments. They range from simple chlorine disinfection to Fine Bubble Air Diffusion.

If you have any questions about this report or your water utility, please contact, **Jeff Patterson, at (717) 337-0164 or write to Gettysburg Municipal Authority, P.O. Box 3307, Gettysburg, PA 17325. You may also e-mail us at [info@gettysburgma.com](mailto:info@gettysburgma.com).** We want our valued customers to be informed about their water utility. This report will also be published on the internet at [www.gettysburgma.com](http://www.gettysburgma.com) for your reference. If you care to learn more, you may attend any of our regularly scheduled meetings. They are held on **the third Monday of every month at 6:00PM prevailing time at the Authority Office, 601 E. Middle Street, Gettysburg, PA 17325.**

Gettysburg Municipal Authority routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the back page shows the results of our monitoring for the period of January 1st to December 31st, 2009. All drinking water, including bottled drinking water, may be reasonably expected to contain **at least small amounts of some contaminants.** It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In the table you may find terms and abbreviations you might not be familiar with. To help you better understand these terms please refer to the following definitions:

**Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present at a detectable level.

**Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Treatment Technique (TT)** - A treatment technique is a required process

# Quality



intended to reduce the level of a contaminant in drinking water.

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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** - The "Goal" (MCLG) is 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.

**Picocuries Per Liter** - A Measure of Radioactivity.

## What do the Test Results Table and definitions mean to you?

All sources of drinking water are subject to potential contamination by constituents that are either naturally occurring or man made. These constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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.

Some of the contaminants in this report were tested for in years prior to 2009. Not every contaminant is tested once annually. For example, alpha emitters (gross alpha) are usually only tested once during a four year monitoring period.

MCL's are set at very protective levels to prevent adverse 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 for a lifetime to have a one-in-a-million chance of experiencing the described health effect.

A significant portion of your water bill is used to constantly test the water delivered to you, and to treat our water sources so that they meet and exceed Federal and State quality standards. In order to insure you our customers an acceptable quality and quantity of water both now and in the future the Gettysburg Municipal Authority has expended several million dollars to drill new wells and to build a new Surface Water Treatment Facility on Marsh Creek in Cumberland Township. Your water rates and fees, which have increased over the past few years, reflect both the costs of maintaining a quality water supply today and developing safe water reserves for the future.

During the 2009 time period this report represents the Gettysburg Municipal Authority routinely tested for over 50 other contaminants not listed on the above chart. None of these contaminants were found in the drinking water. Those tests included: additional Inorganic Chemicals, Synthetic Organic Chemicals, Volatile Organic Chemicals, and Coliform Bacteria.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Due to a problem at the lab, one sample was reported late, 4th quarter HAA5.

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 EPA's Safe Drinking Water Hotline. Some people may be more vulnerable to certain 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. Environmental Protection Agency Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants, which may be found at times in improperly treated water, are available from the Safe Drinking Water Hotline (800-426-4791).

We at Gettysburg Municipal Authority work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. We are committed to supply a top quality product at the most economical rate possible to our customers.

The sources of drinking water (both tap 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 byproducts 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 prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. Gettysburg Municipal Authority 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 and 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Conservation Tips

### Leaks:

- Check toilets for leaks. Use a "leak detector" tablet or food coloring in your tank. If later, without flushing, dye appears in the bowl, you have a leak.
- Check faucets and pipes for leaks. The smallest drip can waste up to 20 gallons or more per day.

### Kitchen & Laundry:

- Run only full loads in your dishwasher and washing machine.
- When selecting appliances, choose energy and water efficient models.
- When hand washing dishes, don't leave the water running for rinsing. If you have two sinks, fill one with soapy water for washing and one with rinse water. If not, gather washed dishes in a dish rack and rinse them with a spray device.
- For food preparation, rinse food in a stopped sink instead of under a steady stream of water.
- Keep a bottle of drinking water in the refrigerator and avoid running the tap until the water is cold.

### Bathroom:

- Don't use the toilet as a trash can. Each flush wastes up to 5 gallons of water.
- Install water saving shower heads or flow restrictors.
- Shorten showers to reduce water usage.
- Turn off water while brushing your teeth or shaving.

### Outside:

- Water your lawn and plants in the early morning or evening hours to prevent evaporation.
- Plan for deeper soaking waterings rather than frequent sprinklings.
- Set your lawn mower one notch higher to limit water evaporation.
- When using a hose, control the flow with an automatic shut off nozzle.
- Check sprinkler heads and valves for leaks.
- Mulch around plants and shrubs to save moisture.
- Grow drought tolerant plants in your garden.
- Cover pools with pool covers to cut evaporation by 90%.
- Use a broom instead of a hose to clean sidewalks and driveways.
- Use a bucket and a hose with a shut-off valve to wash vehicles.
- Prevent leaks by disconnecting hoses and shutting off outdoor water during cold weather.

2009 TEST RESULTS						
<b>Microbiological Contaminants</b>						
Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
1. Total Coliform Bacteria	N	<1	<1	0	0	Naturally present in the environment
2. Turbidity (ntu)	N	0.19	100%	n/a	TT	Soil runoff
3. Total Organic Carbon (ppm)	N	3.0	.95-3.0	n/a	TT	Naturally present in the environment
4. Distribution Chlorine Residual (ppm)	N	1.11	0.57-1.11	4	4	Additive to control Microbes
5. Entry Point Chlorine Residual (ppm)	N	0.47	0.47-1.56	n a	n a	Additive to control Microbes
<b>Inorganic Contaminants</b>						
Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
6. Arsenic(ppb) (2009)	N	9.0	6.1-9.0	n/a	10	Erosion of natural deposits; runoff from orchards runoff from glass and electronics production wastes
7. Barium(ppm) (2009)	N	.20	.12-.20	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
8. Chromium(ppb) (2009)	N	7.4	5.4-7.4	100	100	Discharge from steel and pulp mills; erosion of natural deposits
9. Copper(ppm) (2007)	N	0.433	0 sites above AL	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
10. Fluoride(ppm) (2006)	N	0.11	0.000-0.110	2	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
11. Lead(ppb) (2007)	N	2.8	0 sites above AL	0	AL 15	Corrosion of household plumbing systems, erosion of natural deposits
12. Nitrate(as Nitrogen) (ppm) (2009)	N	3.9	.42-3.9	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
13. Selenium (ppb) (2009)	N	6.5	0-6.5	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
<b>Volatile Organic Contaminants</b>						
Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
14. THM[Total trihalomethanes] (ppb) (2009)	N	29.6	7.3-50.7	0	80	By-product of drinking water chlorination
15. Haloacetic Acids (HAA)(ppb)(2009)	N	21.6	6.8-59.4	60	n/a	By-product of drinking water chlorination
16. Combined Uranium (ppb) (2008)	N	5.7	3.6-5.7	0	30	Erosion of Natural Deposits
17. Combined Radium (PCL) (2008)	N	2.04	N A	0	5	

Footnotes: (a) This reported value is a 90th% level. For example: Gettysburg Municipal Authority took thirty samples, 90% of 30 is 27, and 27 subtracted for 30 is 3. Therefore, the value reported here is the third highest result.