

Borough of Emmaus
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Emmaus, PA 18049

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Emmaus Borough Water System
[PWSID No. PA 3390032]

2010 Annual Water Quality Report

Business Office:
28 S. Fourth Street
Emmaus, PA 18049-3802

Hours: 8 AM – 4 PM
Phone: 610-965-9231
Fax: 610-965-0705

Public Works Department
(24 Hours)
Phone: 610-965-9288

Member: Lehigh Valley Water Suppliers, Inc.

"Working together to support the production and appreciation of high-quality water in the Lehigh Valley"
We welcome any comments that you may have concerning this report.

This is an annual report relating to the quality of water delivered by the Emmaus Borough Water System. This report is in compliance with the federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and the health risks associated with any contaminants. Safe water is vital to our community. Please read this report carefully and, if you have questions, call the numbers listed in this report.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo ó hable con alguien que lo entienda bien.

The bottom line: Is the water safe to drink? Absolutely.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Council meetings occur on the first and third Monday of each month, at Emmaus Borough Hall, 28 S. Fourth St., Emmaus at 7:00 PM. Any changes to the meeting schedules will be published in the local newspaper. The public is welcome.

Find out more about the Emmaus Borough Water System at www.borough.emmaus.pa.us.

Water Source

The Emmaus Borough Water System is supplied by groundwater pumped from 5 wells* located in and around the municipal boundaries of the Borough. *(The Borough has a 6th well, which is currently not in service due to chemical contamination).

2010 Contaminant Table

Inorganic Contaminants	Date Tested	Units	MCL	MCLG	Detected Level	Range	Major Sources of Contamination	Violations
Nitrate	Quarterly	ppm	10	10	4.63	2.46-4.63	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	NO

Lead/Copper	Date Tested	Units	MCL	MCLG	Detected Level	Range	Major Sources of Contamination	Violations
(a) Lead	8/10/10	ppb	AL=15	0	5	na (a)	Corrosion of household plumbing systems; Erosion of natural deposits	NO
(a) Copper	8/10/10	ppm	AL=1.3	1.3	0.133	na (a)	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	NO

Radioactive Contaminants	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources of Contamination	Violations
Gross Alpha	3/19/08	pCi/L	15	0	1.5	na	Erosion of natural deposits.	NO
Radium 226	3/19/08	pCi/L	15	0	0.13	na	Erosion of natural deposits.	NO
Radium 228	3/19/08	pCi/L	15	0	0.89	na	Erosion of natural deposits.	NO

Disinfection By Products	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources of Contamination	Violations
TTHMs (Total Trihalomethanes)	8/11/10	ppb	80	na	20.3	0-20.3	By-product of drinking water chlorination.	NO
HAA5 (Haloacetic Acid)	8/11/10	pCi/L	60	na	4	0-4	By-product of drinking water chlorination	NO

Disinfectants	Date sampled	Unit	MRDL	MRDLG	Detected Level	Range	Typical Source of Contaminant	Violations
Chlorine	Monthly	ppm	4	4	0.67	.44-.67	Water additive used to control microbes.	NO

Water-Quality Table Footnotes:

(a) 0 out of 30 sites tested were above the AL

Key to Table

- AL = Action Level
- MCL = Maximum Contaminant Level
- MCLG = Maximum Contaminant Level Goal
- MRDL = Maximum Residual Disinfectant Level
- MRDLG = Maximum Residual Disinfectant Level Goal
- pCi/l = picocuries per liter (a measure of radioactivity)
- ppm = parts per million, or milligrams per liter (mg/l)
corresponds to 1 minute in 2 years, or one penny in \$10,000.
- ppb = parts per billion, or micrograms per liter (ug/l)
corresponds to 1 minute in 2,000 years, or one penny in \$10,000,000.

What Does This Table Mean?

The table on the opposite page lists all the drinking water contaminants that we detected during the 2010 calendar year, or the most recent testing done in accordance with the current regulations. The presence of these contaminants in the drinking water does not necessarily indicate the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 to December 31, 2010. The state requires us to test for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old, as indicated by the test date. Although we tested for many contaminants, only substances that were detected are listed.

- **Maximum Contaminant Level or 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 or 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.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Maximum Residual Disinfectant Level or 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 or 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 contamination.



Additional Safe Drinking Water Information

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, which much provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at the least small amounts of some contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 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 runoff, industrial or domestic wastewater, oil and gas production, mining, or farming.
- ▶ Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- ▶ Organic chemical contaminants, including synthetic and volatile organics, 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 be naturally occurring or be the result of oil and gas production and mining activities.

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 are available from the Safe Drinking Water Hotline (800-426-4791).

Concerning Lead in Our Water

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested or flush your tap for 1 to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

The United States Environmental Protection Agency (EPA) and the Borough of Emmaus are concerned about lead in your drinking water. If you have any questions about how we are carrying out the requirements of the lead regulation or desire additional information please give us a call at (610) 965-9288.

Concerning Nitrates in Our Water

Nitrates 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 advice from your health care provider. The detected level of nitrates in the Borough's wells is about half of the MCL or about 5ppm.

Be Hydro-Logical

FACT: More water is used in the bathroom than any other place in the home.

ACTION: Turn off the water when you brush your teeth and shave. Install low-flow toilets, shower heads and faucet aerators and you'll save thousands of gallons/liters of water a year. It's a savings that should reduce your water bill.

FACT: A dripping faucet can waste up to 2,000 gallons/7,600 liters of water a year. A leaky toilet can waste as much as 200 gallons/260 liters of water a day.

ACTION: Check your plumbing and repair any leaks as soon as possible.

FACT: Lead in household plumbing can get into your water.

ACTION: Find out if your pipes are lead or if lead solder was used to connect the pipes. If you have lead in your plumbing system, when you turn on the tap for drinking or cooking, let the water run until it's cold. Never use water from the hot tap for cooking or drinking.

FACT: What's dumped on the ground, poured down the drain, or tossed in the trash can pollute the sources of our drinking water.

ACTION: Take used motor oil and other automotive fluids to an automotive service center that recycles them. Patronize automotive centers and stores that accept batteries for recycling. Take leftover paint, solvents, and toxic household products to special collection centers.

FACT: On average, 50% - 70% of household water is used outdoors for watering lawns and gardens.

ACTION: Make the most of the water you use outdoors by never watering at the hottest times of the day or when it's windy. Turnoff your sprinklers when it's raining. Plant low-water use grasses and shrubs to reduce your lawn watering by 20% - 50%.

FACT: Lawn and garden pesticides and fertilizers can pollute the water.

ACTION: Reduce your use of pesticides and fertilizers and look for safer alternatives to control weeds and bugs. For example, geraniums repel Japanese beetles; garlic and mint repel aphids; and marigolds repel whiteflies.

FACT: Your city government and state officials regularly make decisions that affect the quality of your drinking water resources.

ACTION: As the population grows and housing and industrial interest expand, attend local planning and zoning meetings and ask what's being done to protect water resources from contamination. Let elected officials know that you expect them to use their hydro-logic to protect the water.

FACT: Public water utilities regularly test the quality of the drinking water they provide to customers.

ACTION: Call your water utility and ask for a copy of their latest water quality report.

ADDITIONAL INFORMATION

This publication is intended only for customers and users of the Borough of Emmaus Water System. If you received this publication and are not a customer or user of water provided by the Borough of Emmaus Water System please disregard this information.

The Borough of Emmaus samples for lead and copper on a regular schedule. A treatment process, which is approved by PA DEP, has been installed. This treatment process is intended to minimize corrosion of the lead and copper service lines. Future sampling will analyze the effects of this treatment process.

The Borough of Emmaus is unaware of any lead water service lines that connect the homes to the shut-off valves at the curb, which is the owner's portion of the service line. Some of the homes constructed prior to the mid 1950's may have a section of lead pipe from the water main in the street to the shut-off at the curb, which is the water department's portion of the service line. If you are unsure of the type of service line material that enters your home (your service line), personnel from the water department, by appointment, are available to assist you in identifying the material.

The Borough is committed to providing a safe and reliable supply of drinking water to all our customers. As part of that commitment we maintain active memberships in the Lehigh Valley Water Suppliers, Inc., and the American Water Works Association.

The Borough of Emmaus Water Department employees carry identification, drive municipal vehicles and, unless specially scheduled, work week days during the hours of 7 AM to 3 PM.

Water Department employees will, on occasion, contact residents for the purpose of making arrangements for water sampling. During these times, the employees will identify themselves. If you are ever suspicious of a person representing themselves as an employee of the water department or if a person does not appear to have proper identification DO NOT allow them to access your home. You can call the Borough's office at 610-965-9288 or 610-965-9231 and someone can verify the location of our employee.

It is very important that we are able to obtain water samples for testing purposes and if you are contacted to be a potential sampling location your cooperation is appreciated.

Sincerely,
Jeffrey D. Clapper
Public Works Director

Learn more about the Emmaus Borough water system at our web site: www.borough.emmaus.pa.us.



FOR MORE INFORMATION

You can consult a variety of sources for additional information:

Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead.

State and local government agencies that can be contacted include:

**The Pennsylvania Department of Public Health at (717-783-8451) or
1-800-440-5323 (leadline information) or the
Lehigh County Health Department at (610-821-6770)**

can provide you with information about the health effects of lead and tell you how and where you can have your child's blood tested.

The Pennsylvania Department of Environmental Protection (DEP) (610-861-2070)
can provide you with information on this and other environmental programs.

The following is a list of three state approved laboratories in our area that perform water sample testing:

Benchmark Analytics
4777 Saucon Creek Road
Center Valley, PA 18034
Phone: 610-974-8100

M. J. Reider Associates, Inc.
107 Angelica Street
Reading, PA 19611
Phone: 610-374-5129

A-B-E Laboratory
7596-B Bath Pike
Bath, PA 18014
Phone: 610-837-7721

If you would like more information and/or education about issues related to drinking water, the following is a list of organizations and websites you may want to visit.

American Water Works Association	www.awwa.org
Environmental Protection Agency	www.epa.gov/safewater/
Lehigh Valley Water Suppliers	www.lvwater.org
PA Dept of Environmental Protection	www.dep.state.pa.us