

2016 ANNUAL DRINKING WATER QUALITY REPORT

PWSID # 7360135 EAST PETERSBURG BOROUGH WATER DEPARTMENT

Este informe contiene informaci6n importante acerca de su agua potable. Haga que a/guien lo traduzca para usted, 6 hab/e con a/guien que Jo entienda. (This report contains important information about your drinking water. Have someone translate it for you, 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 Jeff Moseman, at 569-2321. We want you to be informed about your supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Tuesday of each month at the Community Center, 6051 Pine 4 Street, East Petersburg, PA at 7:00 p.m.

SOURCES OF WATER:

Our water sources are:

Koser Road Spring 407 Koser Road Lititz, PA

Vaughn Road Well 5856 Vaughn Road East Petersburg, PA 17520

Lancaster City Interconnection 5181 Main Street East Petersburg, PA 17522

A Source Water Assessment of our sources was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our sources of is/are potentially most susceptible to agricultural applications of fertilizers and other chemicals, residential herbicide and pesticides chemical applications and fuel storage accidents, spills along transportation corridors, and road deicing activities. Overall, our sources have moderate risk of significant, contamination. A summary report of the Assessment is available on the Source Water Assessment & Protection web page at:

<http://www.dep.state.pa.us/dep/deputate/watermgmt/wc/Subjects/SrceProt/SourceAssessment/default.html>

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 Pa. DEP South Central Regional Office, Records Management Unit at (717) 705-4732.

Some people may be more vulnerable to contaminants in drinking water than the general population. immunocompromised 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. EPNCDC 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 2016. 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:

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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 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.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

Treatment Technique (TT) - 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 ($\mu\text{g/L}$)

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

DETECTED SAMPLE RESULTS:

Chemical Contaminants

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detection	Units	Sample Date	Violation Y/N	Sources of Contamination
Distribution Chlorine	4	4	1.57	1.17–1.57	ppm	2016	N	Water additive used to control Microbes
Trihalomethanes (TTHM)	80	80	20.2	5.3-20.2	ppb	2016	N	Byproduct of Disinfection
Haloacetic acids HAA5	60	60	5.0	0-5.0	ppb	2016	N	Byproduct of Disinfection
Nitrates- Spring	10	10	5.9	4.9-5.9	ppm	2016	N	Run off from fertilizer use, Erosion of natural deposits
Nitrates- Well	10	10	5.9	4.8-5.9	ppm	2016	N	Run off from fertilizer use, Erosion of natural deposits
Barium- Spring	2	2	0.039	-	ppm	2015	N	Erosion of natural deposits
Barium- Well	2	2	0.026	-	ppm	2015	N	Erosion of natural deposits
Chromium- Spring	0.1	0.1	0.0021	-	ppm	2015	N	Erosion of natural deposits
Chromium- Well	0.1	0.1	0.0025	-	ppm	2015	N	Erosion of natural deposits
Combined Radium-Spring	5pCi/l	5pCi/l	N.D.	-	pCi/l	2014	N	Erosion of natural deposits
Combined Radium-Well	5pCi/l	5pCi/l	N.D.	-	pCi/l	2014	N	Erosion of natural deposits

Entry Point Disinfectant Residual

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detection	Units	Sample Date	Violation Y/N	Sources of Contamination
Spring	0.2	1.28	1.28-2.45	ppm	2016	N	Water additive used to control Microbes.
Well	0.4	.29*	0.29-2.07	ppm	2016	N	Water additive used to control Microbes.

*On 11/27/2017 the Chlorine level dropped to .29 at 8:30 a.m. and returned to .7 at 8:37 a.m.

Lead and Copper

Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	5.20	ppb	0 of 20	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.24	ppm	0 of 20	N	Corrosion of household plumbing.

Microbial

Contaminant	MCL	MCLG	Highest # or % of Positive Samples	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	For systems that collect less than 40 Samples/month: <ul style="list-style-type: none"> More than 1 positive monthly sample For systems that collect more than or equal to 40 Samples/month: <ul style="list-style-type: none"> 5% of monthly samples are positive 	0	0	N	Naturally present in the environment.
Fecal Coliform Bacteria or E. coli	0	0	0	N	Human and animal fecal waste

Turbidity

Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Sources of Contamination
Turbidity	TT=2 NTU for a single measurement	0	0.403	5/06/16	N	Soil runoff
	TT=at least 95% of monthly samples less than or equal to 1.0 NTU		100%	N/A	N	

DETECTED SAMPLE RESULTS: SUSQUEHANNA WATER TREATMENT PLANT: RESULTS ARE FROM THE LANCASTER CITY INTERCONNECT PWSID #7360058

Chemical Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Barium	2	2	0.021		ppm	2015	N	Erosion of natural deposits
Chlorine	MRDL=4	MIN. 0.20	0.4	0.4-2.46	ppm	3/16/16	N	Water additive used to control Microbes
Fluoride	2	2	0.7		ppm	2016	N	Water additive which promotes strong teeth
Nitrate*	10	10	1.35		ppm	2016	N	Runoff from fertilizer use
Combined Uranium	30	0	1.06		ppm	2011	N	Erosion of natural deposits

Contaminant	MCL	MCLG	Level detected	Sample Date	Violation	Sources of Contamination
Turbidity	TT=1 NTU for a single measurement	0	0.13 NTU	9/23/16	N	Soil runoff

Turbidity is a measure of water clarity. Turbidity is continuously tested and monitored.

Contaminant	Range of % Removal Required	Range of % Removal Achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination
Total Organic Carbon	0%-35%	27%-56%	0	N	Naturally present in environment

ADDITIONAL VIOLATIONS:

Monitoring Requirements Not Met for East Petersburg Borough Water

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations. We failed to monitor for Di(2-ethyl.) phthalate, Hexachlorocyclopentadiene and Atrazine and therefore cannot be sure of the quality of our drinking water during that time.

Samples have been taken since that time on 2-21-2017, and were within normal range. There is nothing you need to do at this time.

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 stormwater 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

stormwater 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 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 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).

HEALTH EFFECTS

INFORMATION ABOUT LEAD:

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. East Petersburg Borough Water Department 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 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 <http://www.epa.gov/safewater/lead>.

INFORMATION ABOUT NITRATE:

Nitrate in drinking water at levels above 10-ppm pose 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.

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