

# **2016 ANNUAL DRINKING WATER QUALITY REPORT**

## **PWSID #6250077 - GREENE TOWNSHIP WATER SYSTEM**

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo 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 to you. If you have any questions about this report or concerning your water utility, please contact Peter J. Koehler at 814-825-3347. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings, held at the Greene Township Municipal Building, 9333 Tate Road, Erie, PA 16509, on the second Tuesday of each month at 7:00PM.

### **Sources(s) of Water**

Our water source is comprised of a well field consisting of two wells located on property owned by the Township, also known as the Hartman Road Park. The existing wells have little risk of significant contamination. The water house and wells have been secured by fencing and the wellheads are chained & padlocked. Intake is potentially most susceptible to privately owned failing sewage systems, household pesticide use by surrounding property owners and uncontained major accidental spills along the road. It is encouraged that residents repair any failing sewage systems, limit use of pesticides and when it is necessary to use pesticides please follow instructions on all chemical products being used for lawn care.

### **Source Water Assessment**

A Source Water Assessment of the Hartman Road water source was completed by the PA Department of Environmental Protection (PA DEP) in 1997. The Assessment has found that our sources are potentially most susceptible to pesticides applied the agricultural land. Overall, our sources have been identified as having a susceptibility rating of "B", which is translated to mean High Risk of significant contamination. A complete report of the Assessment is available at the Township Municipal Building. Complete reports were distributed to municipalities, water suppliers, local planning agencies and PA DEP Offices. Copies of the complete report may be obtained by contacting the PA DEP Northwest Regional Office, Records Management Unit at 814-332-6945.

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 and other microbiological 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 table shows the results of our monitoring for the period of January 1 to December 31, 2016. The Commonwealth of PA 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**

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:

*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. MCL's are set as close to the MCLCs 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 contamination.

*Treatment Technique (TT)* – A required process intended to reduce the level of a contaminant in drinking water.

*n/a*: not applicable \* *nd*: not detectable at testing limit \* *ppb*: parts per billion or micrograms per liter \* *pCi/L*: picocuries per liter (a measurement of radiation)

The tables below list all the drinking water contaminants that we detected during the 2016 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2016. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than 1 year old. We have learned through our monitoring and testing that some contaminants have been detected.

**DETECTED SAMPLE RESULTS:**

<b>Chemical Contaminants</b>								
<b>Contaminant</b>	<b>MCL in CCR Units</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>Units</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Nitrate	10	10	1.42	0	ppm	07/01/14	N	Runoff from fertilizer use.
Nitrite	1	1	0	0	ppm	07/03/12	N	Runoff from fertilizer use.
Total Trihalo methanes (TTHMs ppb)	80	n/a	11.8		ppb	08/15/16	N	By product of drinking water chlorination
Barium	2	2	0.194		ppm	07/07/15	N	Erosion of natural deposits
Fluoride	2	2	0.08		ppm	07/03/12	N	Erosion of natural deposits
Antimony	0	0.006	0.006		ppm	07/07/15	N	Erosion of natural deposits
Haloacetic Acids (5)	60	n/a	3.67		ppb	08/15/16	N	By product of drinking water chlorination

<b>Entry Point Disinfectant Residual</b>							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.40	1.27	1.27-3.5	ppm	07/13/16	N	Water additive used to control microbes.

<b>Distribution Disinfectant Residual</b>							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.02	0.96	0.96-1.6	ppm	3/16	N	Water additive used to control microbes.

<b>Lead and Copper</b>							
Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0.0	ppb	0 out of 5	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.193	ppm	0 out of 5	N	Corrosion of household plumbing.

<b>Microbial</b>					
Contaminants	MCL	MCLG	Highest # or % of Positive Samples	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	For systems that collect <40 samples/month: • More than 1 positive monthly sample For systems that collect ≥ 40 samples/month: • 5% of monthly samples are positive	0	0	N	Naturally present in the environment.

### Health Effects

As you can see by the tables, our system had **no detected violations**. We are proud that your drinking water meets or exceeds all Federal and State requirements.

### 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 animal 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 and 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 run-off, 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 run-off and septic systems.
  - Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

### **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. Greene Township 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>.

### **Other Information**

About Nitrate: Nitrate 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 for advice from your health care provider.

In order to assure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

MCL's are set at very stringent levels for health effects. To understand the possible health effects described for many regulated contaminants. A person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements may or may not be reflected as rate structure adjustments. Thank you for understanding.

The Greene Township Water System is professionally maintained and closely monitored by Peter J. Koehler, Certified Water Operator.

Yours truly,  
GREENE TOWNSHIP SUPERVISORS