



MUNICIPAL AUTHORITY OF THE TOWNSHIP OF EAST HEMPFIELD

2017 ANNUAL DRINKING WATER QUALITY REPORT PWSID #: 7360063

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, 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 the Authority at (717) 898-8231. We want you to be informed about your water supply. If you want to learn more, please contact us, or attend one of our regularly scheduled meetings. They are held on the second Friday of each month at 8:00 AM at 920 Church Street, Landisville, PA 17538.

Our water sources are 9 wells and 1 spring located along Church Street, Stony Battery Road, and Nissley Road. Our water is treated with fluoride and chlorine.

A Source Water Assessment of our sources was completed by the PA Department of Environmental Protection (PADEP). Summary reports of the Assessment will be available on the PADEP website at www.dep.state.pa.us (Keyword: "DEP source water"). 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 PADEP Southcentral Regional Office and the Water Authority Office.

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

We routinely monitor for contaminants in your drinking water according to federal and state laws. Potential sources of contamination of the system include agricultural, residential, and commercial activities. The following tables show the results of our monitoring for the period of January 1 to December 31, 2017. 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 that, 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. MCL's 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.

Mrem/year= millirems per year (a measure of radiation absorbed by the body)

pCi/L= picocuries per liter (a measure of radioactivity) **ppm**= parts per million, or milligrams per liter(mg/L)

ppb= parts per billion, or micrograms per liter (ug/L)

Chemical Contaminants

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate	10	10	8.6	4.2 / 8.6	ppm	2017	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Haloacetic Acids (HAA5)	60	N/A	3.0	1 / 3.0	ppb	2017	N	By-product of drinking water disinfection
Trihalomethanes (TTHM)	80	N/A	38	10 / 38	ppb	2017	N	By-product of drinking water disinfection
Chlorine Residual Distribution	MRDL 4	MRDLG 4	0.6	0.44 / 0.6	ppm	2017	N	Water additive used to control microbes
Fluoride	2	2	0.85	0.22 / 0.85	ppm	2015	N	Water additive that promotes strong teeth
Barium	2	2	0.032	0.015 / 0.032	ppm	2015	N	Discharge of drilling wastes; Discharge from refineries; Erosion of natural deposit
Chromium	100	100	1	1 / 1	ppb	2015	N	Discharge from steel and pulp mills; Erosion of natural deposits
Nickel **	N/A	N/A	2	2	ppb	2015	N	Used in electroplating, stainless steel and alloy products. Erosion of natural products.
Radium - 228	5	0	2.4	<1.4 / 2.4	pCi/L	2014	N	Erosion of natural deposits in the source
Benzo(A)Pyrene	2	2	2.5	0 / 2.5	ppb	2017	N	Formed as a result of incomplete combustion of organic materials

** Secondary Contaminate.

Entry Point Disinfectant Residual

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine Residual * Entry Point	0.4	0.38	0.38 / 0.86	ppm	2017	N	Water additive used to control microbes

* **Note:** Lowest level detected was not a violation because it was brought up above a 0.4 reading within four hours.

Microbial Contaminants

Contamination	MCL	MCLG	Highest # or % of Positive Samples	Violation Y/N	Typical Sources of Contamination
Total Coliform	For systems that collect < 40 samples/month: <ul style="list-style-type: none"> More than 1 positive monthly sample For systems that collect ≥ 40 samples/month: <ul style="list-style-type: none"> 5% of monthly samples are positive 	0	0	N See Note:	Naturally present in the environment.

Lead and Copper

Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Sample Date	Violation of TT Y/N	Sources of Contamination
Lead	15	0	5	ppb	1 of 30	2016	N	Corrosion of household plumbing
Copper **	1.3	0	0.16	ppm	0 of 30	2016	N	Corrosion of household plumbing

****Note:** In 2016 the Thank You letters were sent out to the participating samplers reported the 2016 Copper level as *ppb* (parts per billion) and the actual level was *ppm* (parts per million). Example: The result was reported as 5 ppb and should have been reported as 0.05 ppm. The Maximum Action Level (AL) for Copper is 1.3 ppm.

"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. The Municipal Authority of the Township of East Hempfield 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 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>."

Educational Information:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, springs, reservoirs 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).

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.