pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER

2016 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 4110024 NAME: Patton Borough Water Department

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. If you have any questions about this report or concerning your water utility, please contact Kenneth Trinkley, Water Plant Manager at (814) 674-3641. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held Patton Borough Council - Meets the 2nd Tuesday of each month at 7pm and the Patton Muncipal Authority meets the Thursday after the monthly Council meeting at 7pm both are located at the Patton Municipal Building - 800 4th Avenue, Patton, PA 16668.

SOURCE(S) OF WATER:

Our water source(s) is/are: (Name-Type-Location)

Source Code 1 - Chest Creek - Surface Water - Cambria County, PA

Source Code 2 - Well #2 - Ground Water - Klondike Road - Clearfield Twp. Cambria County, PA

Source Code 3 - Well #3 - Ground Water - Gooderham Road - Clearfield Twp. Cambria County, PA

In February 2016 the water source was changed over from surface to ground water for a short time then back to surface water. The groundwater became a permanent source March 1, 2016.

A *Source Water Assessment* of our source(s) was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our source(s) of is/are potentially most susceptible to [insert potential *Sources of Contamination* listed in your *Source Water Assessment Summary*]. Overall, our source(s) has/have [little, moderate, high] 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/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm). 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 Cambria Offices Regional Office, Records Management Unit at (814) 472-1900.

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).

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 (µg/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 Detections	Units	Sample Date	Violation Y/N	Sources of Contamination

TTHM Qtrly Sample Annual RunningAvg	 80 80	 N/A N/A	 43 93	 18-88 18-88	 ppb ppb	 01/19	 Y	
THM Qtrly Sample Annual RunningAvg	 80 80	 N/A N/A	 91 105	 18-88 18-88	 ppb ppb	 04/18	 Y	By production of drinking water chloration
TTHM Qtrly Sample Annual RunningAvg	 80 80	 N/A N/A	 24 76	 18-88 18-88	 ppb pbb	 07/18	 N	
TTHM Qtrly Sample Annual RunningAvg	 80 80	 N/A N/A	 11 42	 18-88 18-88	 pbb ppb	 10/18	 N	
HAA5 Qtrly Sample Annual RunningAvg	 60 60	 	 33 47	 0-62 0-62	 ppb ppb	 01/19	 Y	
HAA5 Qtrly Sample Annual RunningAvg	 60 60	 N/A	 2 31	 0-62 0-62	 ppb ppb	 04/18	 Y	By production of drinking water chloration
HAA5 Qtrly Sample Annual RunningAvg	 60 60	 	 16 22	 0-62 0-62	 ppb pbb	 07/18	 N	
HAA5 Qtrly Sample Annual RunningAvg	 60 60	 	 4 13	 0-62 0-62	 pbb ppb	 10/18	 N	
Fluoride	2	4	0.85	-	ppm	01/08	N	Water additive which promotes strong teeth
Chlorine	MRDL=4	MRDLG =4	1.25	0.2-3.0	ppm	October Highest Monthly Average	N	Water additive used to control microbes.
Nitrate	10	10	<0.50	-	ppm	09/02	N	Runoff from fertilizer.
Nitrite	N/A	N/A	<0.010	-	ppm	09/02	N	Runoff from fertilizer.

*EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

Entry Point Disinfectant Residual

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine		.34	0.5-1.0	ppm	04/20	N	Water additive used to control microbes.

Lead and Copper

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0.014	ppb	2	N	Corrosion of household plumbing.
Copper	1.3	1.3	2.467	ppm	14	Y	Corrosion of household plumbing.

Microbial

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.
Fecal Coliform Bacteria or *E. coli*	0	0	0	N	Human and animal fecal waste.

Raw Source Water Microbial

Contaminants	MCLG	Total # of Positive Samples	Dates	Violation Y/N	Sources of Contamination
E. coli	0		N/A	N	Human and animal fecal waste.

Total Organic Carbon (TOC)

	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical Source
TOC	TT	n/a	59% Removal (35% is required)	30-45% removal	Samples taken quarterly	No	Naturally present in the environment

HEALTH EFFECTS:

TTHMs - (Total trihalomethanes) (ppb) - Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidney or central nervous systems, and may have an increased risk of getting cancer.

Copper (ppm)- Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over may years could suffer liver or kidney damage. People with Wilsoon's Disease should consult their personal doctor. While feedind food grade citric acid for pH adjustments test results showed elevated copper levels. Citric Acid feed was immediately discontinued. Subsequent test results showed levels well below the action level.

OTHER VIOLATIONS:

As you were notified in 2016, each calendar quarter that the MCL for Total Trihalomethanes is exceeded, we are required under the PA Safe Drinking Water Regulations to directly notify our water system users of the problem so that consumers can make informed choices about the drinking water. We failed to provide such direct notification in violation of the Safe Drinking Water Regulations during the following calendar quarters: 2010 – 2nd, 3rd and 4th Quarters, 2011 – 1st, 2nd, 3rd and 4th Quarters, 2012 – 1st, 2nd, 3rd and 4th Quarters, 2013 – 1st, 2nd, 3rd and 4th Quarters, 2014 – 1st, 2nd, and 3rd Quarters, 2015 – 4th Quarter, 2016 – 1st, 2nd Quarters.

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).

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. Patton 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*.

OTHER INFORMATION:

Volatile Organic Contaminate and Synthetic Organic Contaminants were tested fro the last two quarters of 2016. There were no detects of theese types of contanimates. These tests were performed on the ground water.

TTHMs - Are based on the Annual running average, the MCLs for the first and second quarters were exceeded. Once the water source was changed from surface water to groundwater the system no longer exceeded and there were no exceedance in the third and fourth quarters of 2016.