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HARRISON TOWNSHIP

WATER AUTHORITY

1705 REAR FREEPORT ROAD
NATRONA HEIGHTS, PA 15065

ANNUAL DRINKING WATER QUALITY REPORT PWSID #: 5020108 REPORT YEAR 2017

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 our office at (724)226-2500 and speak to the General Manager, Charles Craig. 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 on the third Monday of each month at the Authority Office located at 1705 Rear Freeport Road. Our constant goal is to provide you with a dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

SOURCE(S) OF WATER:

Our water source is the Allegheny River and our raw water intake is located at mile point 24 just above Lock No. 4. A Source Water Assessment of our Allegheny River Intake was completed by the PA Department of Environmental Protection (PA DEP) in 2014 in cooperation with four other community water systems and the Allegheny County Health Department in order to develop a regional plan for those water suppliers with surface water intakes on the lower portion of the Allegheny River. The Assessment has found that our source is potentially most susceptible to accidental spills from businesses and transportation and runoff from non-point sources. Overall, our source has a moderate risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment eLibrary page at the following address:

<http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=3205&DocName=HARRISON%20TOWNSHIP%20WATER%20AUTHORITY.PDF%20> Complete reports were distributed to municipalities, water suppliers, local planning agencies and PA DEP offices. Copies of the complete report are available for review at the Records Management Unit of the PA DEP Southwest Regional Office, at (412)442-4200.

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:

The Harrison Township Water Authority routinely monitors 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, 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 data has been noted on the sampling results table included on the following pages.

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.

Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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)

ppm = parts per million, or milligrams per liter (mg/L)

ppb = parts per billion, or micrograms per liter (µg/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
Chlorine	MRDL= 4	MRDLG = 4	1.04	0.55 to 1.04	ppm	2017	N	Water additive used to control microbes
Barium	2	2	0.037	a.)	ppm	03/17/17	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2	2	0.664	a.)	ppm	03/08/17	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	10	10	0.563	a.)	ppm	07/05/17	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
HAA5s	60	N/A	25.98	12.7 to 33.8	ppb	2017	N	By-product of drinking water disinfection
TTHMS	80	N/A	62.56	20.5 to 93.6	ppb	2017	N	By-product of drinking water disinfection

*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	4	0.8	0.8 to 1.5	ppm	2017	N	Water additive used to control microbes.

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	0	ppb	0	N	Corrosion of household plumbing
Copper	1.3	1.3	0.053	ppm	0	N	Corrosion of household plumbing

Turbidity							
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination	
Turbidity	TT=1 NTU for a single measurement	0	0.09	01/14/2017	N	Soil runoff	
	TT= at least 95% of monthly samples ≤ 0.3 NTU		100%	All samples within compliance	N		

Total Organic Carbon (TOC)					
Contaminant	Range of % Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination
TOC	0-35	39.0 to 52.8	0	N	Naturally present in the environment

a.) Only one sample required.

VIOLATIONS:

Our water system did violate a drinking water standard during the year when our certified laboratory failed to submit the results of our third quarter testing for several synthetic organic chemicals (SOCs) prior to the required deadline imposed by the Pennsylvania Department of Environmental Protection. The testing results, indicating zero for the amount detected for the four substances, were submitted at a later date prior to year's end. Additional checks have been implemented by our certified laboratory to prevent the reoccurrence of such an event. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

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. The Harrison Township Water Authority 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>.

ADDITIONAL MONITORING

Additional testing was conducted by the Harrison Township Water Authority during 2017 to comply with Phase 2 of the Long Term 2 Enhanced Surface Water Treatment Rule. The Authority conducted testing for the presence of cryptosporidium oocysts in our source water on a monthly basis as required by the Long Term 2 Enhanced Surface Water Treatment Rule. Cryptosporidium oocysts were detected on two occasions during the sampling process.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

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