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# The Water We Drink HARRISON TOWNSHIP WATER AUTHORITY PWSID # 5020108 REPORT YEAR 2016

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak to someone who understands it.)

We're pleased to present to you this year's edition of "The Water We Drink". 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. Our water source is the Allegheny River and our raw water intake is located at mile point 24 just above Lock #4. The Authority participates in the AWWA Partnership for Safe Water, the Pennsylvania Department of Environmental Protection's Source Water Protection Program, the River Alert Information Network and works closely with the Allegheny County Health Department as well as the Pennsylvania Department of Environmental Protection to ensure the Authority complies with drinking water regulations.

This report is intended to provide information as to the quality of the water supplied by the Harrison Township Water Authority and what the information means. If you have any questions or comments 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 to keep our valued customers informed about their water utility. 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.

A Source Water Assessment of the Allegheny River Intake, which supplies water to the Harrison Township Water Authority Filtration Plant, was completed in 2003 by the PA Department of Environmental Protection (PA DEP). The report provides detailed information on potential sources of contamination to the Authority's Allegheny River Intake. An update of the assessment was undertaken during 2014 in cooperation with four other community water systems, the Allegheny County Health Department and PA DEP in order to develop a regional plan for those water suppliers with surface water intakes on the lower portion of the Allegheny River. Project work resulted in development of the Lower Allegheny River Partnership Source Water Protection Plan which was finalized in 2015. Overall, our water source has little risk of significant contamination.

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 at (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 monitoring conducted by the Authority 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 on the following pages.

## **DEFINITIONS AND ABBREVIATIONS**

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.

ppb = parts per billion, or micrograms per liter ( $\mu g/L$ )

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

DETECTED SAMPI	E RESUL	TS						
Chemical Contaminant	MCL in CCR units	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Inorganic Contaminant	ts							
Barium	2	2	0.038	(a.)	mg/L	02/03/16	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2	2	0.732	(a.)	mg/L	02/03/16	N	Erosion of natural deposits, Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	10	10	1.58	(a.)	mg/L	07/13/16	N	Runoff from fertilizer use, leeching from septic tanks, sewage; Erosion of natural deposits
Organic Contaminants								
Total organic carbon	TT = 35%	n/a	No quarters out of compliance	39.3 to 62.9	%	2016	N	Naturally present in the environment
Disinfection Byproducts	s							
Halocetic Acids (HAA)	60	n/a	22	7 to 38	ppb	2016	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	80	n/a	60	8 to 102	ppb	2016	N	By-product of drinking water disinfection

Disinfectants	MRDL	MinRDL	Level Detected	Range	Units	Sample Date	Violation	Sources of Contamination
Chlorine - Residual Entry Point	4	0.2	0.8	0.8 to 1.5	mg/L	2016	N	Water additive used to control microbes
Chlorine - Residual Distribution System	4	0.02	0.99	0.57 to 0.99	mg/L	2016	N	

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Sample Date	Violation of TT Y/N	Sources of Contamination
Lead (b.)	15	0	0	ppb	0	08/10/16, 08/17/16 and 08/19/16	N	Corrosion of household plumbing
Copper	1.3	1.3	0.053	ppm	0	08/10/16, 08/17/16 and 08/19/16	N	Corrosion of household plumbing

Contaminan t	MCL	MCLG	Level Detected	Sample Date	Violation of TT Y/N	Source of Contamination
Turbidity	TT=1 NTU for a Single measurement		0.06 NTU	Multiple dates in 2016	N	
	TT = at least 95% of monthly samples < 0.3 NTU	0	100%	All samples within compliance	N	soil runoff

# Footnotes:

(a.) Only one sample required.

(b.) 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. 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.

# ADDITONAL MONITORING

Additional testing was initiated by the Harrison Township Water Authority during 2016 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 beginning in October. Cryptosporidium oocysts were detected on one occasion 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. 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.

## **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 storm water runoff, 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 storm water 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 storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or 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).

Harrison Township Water Authority