

JUNE 2020

HILLTOWN TOWNSHIP WATER AND SEWER AUTHORITY 2019 WATER QUALITY REPORT

HTWSA WATER SYSTEM ♠ PWSID #1090117 & PWSID #1090162

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.)

HTWSA's Commitment to you: Safe & Reliable Drinking Water

Coronavirus and Drinking Water

The following is information from the EPA's press release regarding COVID-19 concerning its impact on drinking water.

"There is no higher priority for EPA than protecting the health and safety of Americans. EPA is providing this important information about COVID-19 as it relates to drinking water and wastewater to provide clarity to the public. The COVID-19 virus has not been detected in drinking water supplies. Based on current evidence, the risk to water supplies is low. Americans can continue to use and drink water from this tap as usual. EPA also encourages the public to help household plumbing and out nation's water infrastructure operating properly by only flushing toilet paper. Disinfecting wipes and other items should be disposed of in the trash, not the toilet.

On March 27, 2020, EPA Administrator Andrew Wheeler sent a letter to Governors in all fifty states, territories, and Washington, D.C., requesting that water and wastewater workers, as well as the manufacturers and suppliers who provide vital services and materials to the water sector, are considered essential works and businesses by state authorities when enacting restrictions to curb the spread of COVID-19. Our critical water infrastructure and its operators ensure the safe supply of water to our homes and hospitals, and depend on treatment chemicals, laboratory supplies, and related goods and materials.

EPA also supports states and cities that have already taken proactive measures to ensure continued access to clean water for drinking and handwashing during the COVID-19 pandemic. Many drinking water systems are discontinuing service cut-offs, restoring service to customers whose service was previously cut-off, and refraining from imposing penalties for nonpayment. EPA recommends widespread adoption of these practices, which provide critical support for public health."

How Good is Hilltown's Water?

The Hilltown Township Water and Sewer Authority (HTWSA) has been committed to providing residents with a safe and reliable supply of high-quality drinking water since 1986. We



test our water using the most current equipment and methods to ensure safe drinking water. This annual report will provide you with information regarding the source of your water; test results; and other things you should know about the water you use.

We are proud to report that the water we provide to you exceeds the water quality standards of the Pennsylvania Department of Environmental Protection and the U.S. Environmental Protection Agency. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

You may also visit EPA's drinking water website for more information about drinking water standards and quality. www.epa.gov/safewater

Drinking Water Meets and Exceeds EPA and PADEP



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, 2019. 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 table results. ♦

Important Health Information

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 ways to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). ♦

DETECTED SAMPLE RESULTS—HTWSA CENTRAL DISTRIBUTION

INORGANIC CONTAMINANTS							
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Copper	1.3	1.3	0.206	ppm	0 of 21	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Contaminant	MCL	MCLG	Level Detected	Range	Units	Violation Y/N	Sources of Contamination
Arsenic	10	0	4.5	0-4.5	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (2018)	2	2	0.20	0.05 - 0.20	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (2018)	100	100	3.1	0 - 3.1	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (2018)	200	200	8	0 - 8	ppb	N	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Nitrate	10	10	1.59	0-1.59	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sew-age; Erosion of natural deposits

HTWSA serves customers on two distribution systems. The majority of our customers are served by the Central Distribution System (PSWID 1090117). This system is supplied water from HTWSA wells and an interconnection with North Penn Water Authority (NPWA).

DETECTED SAMPLE RESULTS—HTWSA CENTRAL DISTRIBUTION

DISINFECTION BYPRODUCTS

Contaminant	MCL	MCLG	Level Detected	Range	Units	Violation Y/N	Sources of Contamination
Chlorine (In System)	MRDL =4	MRD-LG=4	0.97	0.64-0.97	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAAs)	60	n/a	3.5*	0-7.3	ppb	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	80	n/a	17.4*	0-35.0	ppb	N	Byproduct of drinking water disinfection

RADIONUCLIDES

Gross Alpha (2018)	15	0	7.71	5.01 - 7.71	pCi/L	N	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
Combined Uranium (2018)	30	0	7.30	5.27 - 7.30	pCi/L	N	Erosion of natural deposits

* This value represents the Running Annual Average

ENTRY POINT DISINFECTION RESIDUAL—WELLS 1, 2, AND 5

Contaminant	Minimum Residual	Lowest Level	Range	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.40	0.41	0.41-2.87	ppm	Daily 2019	N	Water additive used to control microbes.

Regulated contaminants not listed in the table were not detected in our samples.

Key To Tables (HTWSA & NPWA)

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.

Action Level (AL) = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

ppb = parts per billion, or micrograms per liter (µg/L), One part per billion corresponds to a single penny in \$10,000,000.

ppm = parts per million, or milligrams per liter (mg/L), One part per million corresponds to a single penny in \$10,000.

pCi/L = picocuries per liter (a measure of radioactivity)

NTU - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person

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

N/A—Not Applicable

WHAT ELSE SHOULD I KNOW?

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, these include viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, these include 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, these may come from a variety of sources such as agriculture, urban storm water run off, and residential uses.

Organic chemical contaminants, these include 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.

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. HTWSA 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>.

Information about Copper: 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 many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Other Contaminants Tested But Not Detected: Lead; Fecal Coliform Bacteria; Nitrite; Regulated Volatile Contaminants, such as Benzene, Ethylbenzene, Toluene and Xylenes; Synthetic Organic Chemicals, such as Chlordane, Ethylene Dibromide (EDB), Diquat, and Endrin.

Radioactive contaminants, these can be naturally occurring or be the result of oil and gas production and mining activities.

In order to assure 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 and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline. ♦

SAMPLING AND TESTING

Hilltown Township Water and Sewer Authority routinely monitors for constituents in your drinking water according to the Federal and State laws. In order to ensure that tap water is safe to drink EPA prescribes regulations which limit the amount of certain contaminants in water provided by public systems. HTWSA has met or exceeded all standards set forth for quality and safety.

During 2019, samples were tested at Analytical Laboratories, Inc. Chalfont, PA (215) 723-6466. More information about contaminant and potential health effects can be obtained by calling the Environmental Protection Agency.

Safe Drinking Water Hotline
1-800-426-4791

Other Violations: During third quarter in 2019 the testing for Synthetic Organic Chemicals (SOCs) and Volatile Organic Compounds (VOCs) was reported late, but reached compliance. The third quarter samples should have been taken in June 2019 but were actual taken on September 11, 2019. Please be advised that the resulting violation generated was due to timing and has nothing to do with the quality of the results found. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. In addition, DEP cited two monitoring and reporting violations in 2019 for late reporting in March and April. We are required to monitor the chlorine levels in your water daily as it leaves the treatment plant. The water was sampled and tested as required and was always within allowable levels; however, in those months data was not submitted to DEP by the deadline.

Where Does Your Water Come From?

In 2019, three municipal groundwater wells and an interconnection with North Penn Water System fulfill the needs of HTWSA's customers. HTWSA's wells are located in the East Branch Perkiomen watershed. Well No.1 is located off Thistle Lane, Well No. 2 is located on South Perkasio Road, and Well No. 5 is located on Route 152. Arsenic treatment and disinfection are conducted at each well facility prior to distribution. A copy of the Source Water Assessment is available for viewing at the HTWSA Office.

HTWSA has two interconnects with North Penn Water Authority (NPWA). The southern connection is the sole source for the Ridge and Reserve at Hilltown. The northern interconnect is the supplementary water source for the central distribution system.

HTWSA customers living in the **Hilltown Ridge** and **Reserves at Hilltown** subdivisions are served by the Southern Distribution System (PWSID #1090162) This system is supplied solely through an interconnect with NPWA. HTWSA monitors contaminants which are associated with distribution of drinking water for this System. Contaminants which are associated with source water are monitored by NPWA.

DETECTED SAMPLE RESULTS—HTWSA SOUTHERN DISTRIBUTION

INORGANIC CONTAMINANTS

Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Copper	1.3	1.3	0.315	ppm	0 of 5	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	15	0	0	ppb	0 of 5	N	Corrosion of household plumbing systems; Erosion of natural deposits
Contaminant	MCL	MCLG	Level Detected	Range	Units	Violation Y/N	Sources of Contamination
Chlorine (In System)	MRDL =4	MRD-LG=4	0.9	0.54-0.9	ppm	N	Water additive used to control microbes.

DISINFECTION BYPRODUCTS

Contaminant	MCL	MCLG	Level Detected	Range	Units	Violation Y/N	Sources of Contamination
Haloacetic Acids (HAA5)	60	n/a	9.2	9.2	ppb	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	80	n/a	39.4	39.4	ppb	N	Byproduct of drinking water disinfection

Other Violations: None

Source Water Information—NPWA

In 2019, approximately 88% of the water that NPWA delivered to its customers was treated surface water from the Forest Park Water (FPW) Treatment Plant located in Chalfont. The North Branch Neshaminy Creek originates as a small stream near Route 413 in Central Bucks County. The creek flows into Lake Galena, which is the reservoir for Forest Park Water. Water released from the Lake Galena flows down the Neshaminy Creek to where it is drawn into the FPW, in Chalfont, PA. Due to high demand of water from Forest Park, water is pumped from the Delaware River at Point Pleasant and diverted into the North Branch Neshaminy Creek near Gardenville, PA. This diversion controls the level of Lake Galena for recreational purposes, ensures a sufficient drinking water supply, and maintains base flow in the stream.

The remaining 12% of water came from 13 groundwater supply wells that NPWA operates. These wells are located throughout the service territory, in Bucks and Montgomery Counties. The water from these wells is chlorinated before it is delivered to NPWA customers' homes. ♦

SUMMARY OF NPWA WATER QUALITY DATA (PWSID #1460034)

Contaminant	MCL	MCLG	Level Detected	Range Detected	Units	Sample Date	Violation Y/N	Sources of Contamination
Chemical Contaminants								
Bromate	10	0	3.6	2.0-3.6	ppb	2019	N	Byproduct of drinking water disinfection
Chlorine (in Distribution System)	MRDL=4	MRDL=4	1.07	0.83-1.07	ppm	2019	N	Water additive used to control microbes
Arsenic	10	0	5.6	0-5.6	ppb	2018 and 2019	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2	2	0.51	0.014-0.51	ppm	2018 and 2019	N	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2	2	0.106	0-0.106	ppm	2018 and 2019	N	Erosion of natural deposits; Discharge from fertilizer and aluminum facilities
Nitrate	10	10	4.81	0-4.81	ppm	2019	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Tetrachloroethylene	5	0	0.934	0-0.934	ppb	2019	N	Discharge from factories and dry cleaners
Haloacetic Acids (ppb)	60	N/A	13.4 ^a	3.86-21.6	ppb	2019	N	By-product of drinking water disinfection
Total Trihalomethanes (ppb)	80	N/A	35.1 [*]	14.5-61.1	ppb	2019	N	By-product of drinking water disinfection
Alpha Emitters	15	0	5.68	0.15-5.68	pCi/L	2017	N	Erosion of natural deposits
Combined Radium	5	0	1.18	0.06-1.18	pCi/L	2017	N	Erosion of natural deposits
Uranium	30	0	5.50	1.44-5.50	µg/L	2017	N	Erosion of natural deposits

**Compliance is based on a running annual average of quarterly results. The value represents the highest running annual average results, not a single sample results.*

ENTRY POINT DISINFECTION RESIDUAL

Contaminant	Minimum Residual	Lowest Level	Range	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine - Wells	0.4	0.03*	0.03-1.36	ppm	Daily 2019	N	Water additive used to control microbes.
Chlorine - FPW	0.2	1.01	1.01-1.70	ppm	Daily 2019	N	Water additive used to control microbes.

**Chlorine levels did not drop below the minimum residual levels required for more than 4 hours.*

TURBIDITY AT FOREST PARK WATER TREATMENT PLANT

Contaminant	MCL	MCLG	Level Detected	Range Detected	Sample Date	Violation Y/N	Sources of Contamination
Turbidity	TT=1 NTU for a single measurement	N/A	0.07	0.03-0.07	2019	N	Soil runoff
	TT= at least 95% of monthly samples ≤ 0.3 NTU	N/A	100%	N/A	2019	N	

SUMMARY OF NPWA WATER QUALITY DATA						
Contaminant (Unit of measurement)	Violation Y/N	90th Percen- tile Result	Action Level (AL)	MCLG	# Sites above AL of total	Sources of Contamination
REGULATED AT THE CUSTOMER'S TAP (2017)						
Copper (ppm)	N	0.356	90% of homes must test less than 1.3 ppm	1.3	0 out of 31	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	N	2.0	90% of homes must test less than 1.5 ppb	0	0 out of 31	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Contaminants which were tested for, but not detected include: E. Coli and Total Coliform Bacteria

THINGS YOU SHOULD KNOW ABOUT NPWA'S WATER QUALITY TESTING

Turbidity

Turbidity is a measure of the cloudiness of the water and is a good indicator of the effectiveness of the NPWA filtration system. As a member of the partnership for Safe Drinking Water, NPWA's goal is to achieve <0.1 NTU. In 2019, NPWA achieved this goal for all samples.

Cryptosporidium and Giardia

Cryptosporidium and *Giardia* are microbial pathogens found in surface water throughout the US. Monitoring conducted in 2017 of the water source (before treatment) at FPW indicated the presence of *Cryptosporidium* in 3 out of 9 samples collected. *Giardia* was detected in 5 out of 9 samples collected. Although FPW treatment process includes filtration to remove *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. 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, immune-compromised people, infants and small children, and the elderly are at a greater risk of developing life threatening illness. NPWA encourages immune-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.

Unregulated Contaminant Monitoring

Unregulated contaminants are those don't have a drinking water standard set USEPA. The purpose of the monitoring for these contaminants is to help USEPA decide whether the contaminants should have a standard. In 2018, Unregulated Contaminant Monitoring Rule 4 (UCMR 4) began at FPW. Monitoring of NPWA Wells and distribution system will begin in July 2019 and will continue through April 2020. The results for FPW that NPWA has received as of March 2019 are presented the NPWA Annual Water Quality Report, available online.

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.

Source Water Assessment Information

A Source Water Assessment of the North Branch Neshaminy Creek Intake, which supplies water to the FPW Treatment Plant, was completed and prepared by Spotts, Stevens & McCoy, Inc. for the PaDEP. The Assessment found that the North Branch Neshaminy Creek Intake is potentially susceptible to point sources of pollution from auto repair shops, wastewater treatment plants, boating, quarries, on-lot septic systems and gas stations. Non-point sources of potential contamination include major transportation corridors and runoff from areas of urban development, livestock farming, and industrial parks. The most serious sources are related to the accidental release of a variety of materials along transportation corridors and high nutrients from Lake Galena. The Forest Park Water Treatment Plant has the capability to treat a wide array of contaminants and minimize any negative impacts from such sources. Regular and frequent monitoring of the water supply allows NPWA to identify any concerns and remediate any problems in a timely manner. Contingency plans and emergency response plans are in place to deal with any release of contaminants or accidental occurrences that could compromise the integrity of your water quality.

A Water Source Assessment of NPWA groundwater sources was completed by PaDEP. Most of the land that surrounds NPWA wells is highly developed commercial and residential areas, with a small amount of forested or agricultural/undeveloped land. The Assessment found that the groundwater sources are potentially most susceptible to transportation corridors, residential and agricultural activities, railroad transportation, auto repair shops, machine/metal working businesses, National Priorities List (NPL) sites, industrial wastewater disposal, golf courses, a recycling center and a print shop. Summary reports of the Assessments are available on the Source Water Assessment Summary Reports eLibrary web page: <http://www.dep.state.pa.us/elibrary>. Complete reports are distributed to municipalities, water suppliers, local planning agencies and Pa DEP offices. Copies of the complete reports are available for review at the Pa DEP Southeast Regional Office, Records Management Unit at (484) 250-5910.

HILLTOWN TOWNSHIP WATER AND SEWER

Hilltown Township Water and
Sewer Authority
P.O. Box 365
Sellersville, PA 18960

Regular Hilltown Water and Sewer Authority Meetings are held on the second Wednesday of every month at 7:30 p.m. at the Authority Office.

316 Highland Park Road
Hilltown Township

Customer Service: (215) 453-6065

Emergency After-Hours (215) 453-6065

EPA Safe Drinking Water Hotline (800) 426-4791

Contact Authority Manager James C. Groff if you have any questions concerning this report. Hilltown Water and Sewer Authority is a member of the Pennsylvania Rural Water Association and the American Water Works Association.

The logo for Hilltown Township Water and Sewer Authority (HTWSA) features the letters 'HTWSA' in a bold, blue, serif font. The letters are arranged in a slightly arched pattern, with the 'H' and 'T' on the left, 'W' in the center, and 'S' and 'A' on the right.

WE'RE ON THE WEB!!

WWW.HTWSA.ORG

NorthPennWater.org