

JUNE 2021

# HILLTOWN TOWNSHIP WATER AND SEWER AUTHORITY 2020 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

### New Water Supply Source in the Works for HTWSA

The Authority has acquired the necessary agreements and property rights to install a new well on the lands of the Regency at Hilltown Community Association. A test well has been installed and tested. It has proven to be a viable and excellent source of water. The new well will be used to supplement the Authority's current water supply and, most importantly, it will supply the northeastern water service area in the event the supply line serving the area is damaged or is needed to be taken out of service. That area is currently served by

a single 12 inch water line extended by Toll Brothers about 2 miles from Blooming Glen Road, through the Village of Blooming Glen to the Regency development. It was further extended by Wawa to their new store at Routes 113 and 313. The new well is in the permit/approval phase and is expected to be placed on line in 2022. The well is part of the Authority's continued efforts to invest in the water supply infrastructure for the Township by improving the reliability and safety of the system.



### 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](http://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, 2020. 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 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Copper (2019)	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	4.9	0-4.9	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	1.67	0-1.67	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	1.56	0.24-1.56	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAAs)	60	n/a	4.1*	2.3-6.5	ppb	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	80	n/a	19.6*	11.4-35.5	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	0.45	0.45-2.02	ppm	Daily 2020	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.

**Information about Haloacetic Acids (HAA):** Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

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

**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 affects 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 Contaminants Tested But Not Detected:** Radium -226; Radium-228; Lead; Manganese; 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.

**Other Violations:** The 2019 sample results for Volatile Organic Compounds (VOCs) were reported late, but reached compliance. The first quarter of 2021 sample results for disinfection byproducts (TTHM and HAA5) were reported late, but reached compliance. Please be advised that the resulting violation generated was due to the timing of the testing. Testing was completed and there was no water quality violations. 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.

## Where Does Your Water Come From?

In 2020, 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.

## Source Water Information—NPWA

In 2020, 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. ♦

## DETECTED SAMPLE RESULTS—HTWSA SOUTHERN DISTRIBUTION

### INORGANIC CONTAMINANTS

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Copper (2019)	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 (2019)	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	0.99	0.6-0.99	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	11.1	11.1	ppb	N	Byproduct of drinking water disinfection
Total Trihalo-methanes (TTHMs)	80	n/a	43.1	43.1	ppb	N	Byproduct of drinking water disinfection

**Other Violations:** DEP cited violations for February 2020 for missing testing and March 2020 for late reporting. We are required to monitor chlorine residual in the distribution system on a weekly basis. During January 26 to February 1, 2020, we did not monitor or test for the weekly chlorine residual and therefore cannot be sure of the quality of your drinking water during that time. During March 15 to March 21, 2020, we did not report the weekly chlorine residual by the deadline to DEP. The water was sampled and tested as required and was within the allowable levels.

**Information about Chlorine:** Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose or stomach discomfort.

# HILLTOWN TOWNSHIP WATER AND SEWER AUTHORITY

The following contains information about the water quality from the NPWA system.

## SUMMARY OF NPWA WATER QUALITY DATA (PWSID #1460034)

Contaminant	MCL	MCLG	Level Detected	Range Detected	Units	Sample Date	Violation Y/N	Sources of Contamination
<b>Chemical Contaminants</b>								
Bromate	10	0	2.2	1.5-2.2	ppb	2020	N	Byproduct of drinking water disinfection
Chlorine (in Distribution System)	MRDL=4	MRDL=4	1.09	0.99-1.09	ppm	2020	N	Water additive used to control microbes
Arsenic	10	0	5.6	0-5.6	ppb	2018 and 2020	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2	2	0.51	0.019-0.51	ppm	2018 and 2020	N	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2	2	0.106	0-0.106	ppm	2018 and 2020	N	Erosion of natural deposits; Discharge from fertilizer and aluminum facilities
Nitrate	10	10	4.76	0.354-4.76	ppm	2020	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Tetrachloroethylene	5	0	0.692	0-0.692	ppb	2020	N	Discharge from factories and dry cleaners
Haloacetic Acids (ppb)	60	N/A	9.72 <sup>a</sup>	3.04-44.5	ppb	2020	N	By-product of drinking water disinfection
Total Trihalomethanes (ppb)	80	N/A	30.0 <sup>a</sup>	10.1-58.5	ppb	2020	N	By-product of drinking water disinfection
Alpha Emitters	15	0	5.68	0-5.68	pCi/L	2017 and 2020	N	Erosion of natural deposits
Combined Radium	5	0	1.18	0.06-1.18	pCi/L	2017 and 2020	N	Erosion of natural deposits
Uranium	30	0	5.50	1.28-5.50	µg/L	2020	N	Erosion of natural deposits

<sup>a</sup>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	0.29*	0.29-1.48	ppm	Daily 2020	N	Water additive used to control microbes.
Chlorine - FPW	0.2	1.08	1.08-1.73	ppm	Daily 2020	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	0.06	0.02-0.06	2020	N	Soil runoff
	TT= at least 95% of monthly samples ≤ 0.3 NTU		N/A	100%	N/A	2020	N	

SUMMARY OF NPWA WATER QUALITY DATA						
Contaminant (Unit of measurement)	Violation Y/N	90th Percentile Result	Action Level (AL)	MCLG	# Sites above AL of total	Sources of Contamination
REGULATED AT THE CUSTOMER'S TAP (2017)						
Copper (ppm) (2019)	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) (2019)	N	1.9	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, Total Coliform Bacteria, Inorganic Chemicals, Synthetic Organic Chemicals, Volatile Organic Chemicals

## 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 2020, 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 2020 of the water source (before treatment) at FPW indicated the presence of *Cryptosporidium* in 2 out of 4 samples collected. *Giardia* was detected in 3 out of 4 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. From October 2019 to July 2020, Unregulated Contaminant Monitoring Rule 4 (UCMR 4) sampling was conducted at FPWTP, NPWA Wells and distribution system. For more information is available on 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, three-dimensional style, giving the logo a sense of depth and prominence.

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WE'RE ON THE WEB!!

[WWW.HTWSA.ORG](http://WWW.HTWSA.ORG)

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[NorthPennWater.org](http://NorthPennWater.org)