April 2025

HILLTOWN TOWNSHIP WATER AND SEWER AUTHORITY
2024 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

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**

HTWSA

WE'RE ON THE WEB!
WWW.HTWSA.ORG

NorthPennWater.org

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). ♦

Regular Hilltown Water and Sewer Authority Meetings are held on the 2nd 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

Hilltown Water and Sewer Authority is a member of the Pennsylvania Rural Water Association and the American Water Works Association.

Your Drinking Water Meets & Exceeds EPA & PA DEP Standards

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, 2024. 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.

Where Does Your Water Come From?

In 2024, three municipal groundwater wells and interconnections with North Penn Water System fulfilled the needs of HTWSA's customers. The wells are located in the East Branch Perkiomen Watershed. Well No. 1 is located off Thistle Lane. Well No. 2 is located on South Perkasie Road. 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.

HTSWA 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 a 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. A copy of NPWA Annual Water Quality Report is attached.

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

INORGANIC CONTAMINANTS

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Range of Detection	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Copper (2022)	1.3	1.3	0.18	0.23-1.3	ppm	0 of 20	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2022)	15	0	2.21	0-3.1	ppb	0 of 20	N	Corrosion of household plumbing systems; Erosion of natural deposits

PFAS CONTAMINANTS

Contaminant	MCL	MCLG	Level Detected	Range of Detection	Units		Violation Y/N	Sources of Contamination
Perfluorooctanesulfonic acid (PFOS)	18	14	4.24	0-5.84	ppm		N	Discharge from manufacturing facilities and runoff from land use activities
Perfluorooctanoic acid (PFOA)	14	8	4.6	0-6.86	ppm		N	Discharge from manufacturing facilities and runoff from land use activities

*HTWSA is currently in the process of adding a PFAS treatment process to the HTWSA Water

RADIONUCLIDES

Contaminant	MCL	MCLG	Level Detected	Range	Units	Violation Y/N	Sources of Contamination
Gross Alpha (2023)	15	0	6.76	0-6.76	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	30	0	10.382	0-10.382	ug/L	N	Erosion of natural deposits

DETECTED SAMPLE RESULTS—HTWSA CENTRAL DISTRIBUTION

DISINFECTION BYPRODUCTS

Contaminant	MCL	MCLG	Level Detected	Range	Units	Year	Violation Y/N	Sources of Contamination
Haloacetic Acids (HAA5)	60	n/a	6.6	3.2-12.2	ppb	2024	N	Byproduct of drinking water disinfection.
Trichloroacetic Acid (HAA)	60	n/a	1.8	1.2-2.4	ppb	2024	N	Byproduct of drinking water disinfection
Dichloroacetic Acid (HAA)	60	n/a	3.6	1.4-8.2	ppb	2024	N	Byproduct of drinking water disinfection
Dibromoacetic Acid (HAA)	60	n/a	1.3	0-2.4	ppb	2024	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	80	n/a	26.7	15.4-46	Ppb	2024	N	Byproduct of drinking water chlorination
Bromodichloromethane (THM)	80	n/a	8.9	5.2-15.4	ppb	2024	N	Byproduct of drinking water chlorination
Chlorodibromomethane (THM)	80	n/a	6.4	4.5-10.3	ppb	2024	N	Byproduct of drinking water chlorination
Chloroform (THM)	80	n/a	9.4	4.3-17.2	ppb	2024	N	Byproduct of drinking water chlorination
Bromoform (THM)	80	n/a	2	1.3-3.2	ppb	2024	N	Byproduct of drinking water chlorination

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 (ID 101)	0.40	0.5	0.5-1.92	ppm	Daily 2024	N	Water additive used to control microbes.
Chlorine (ID 102)	0.40	0.41	0.41-1.78	ppm	Daily 2024	N	Water additive used to control microbes.
Chlorine (ID 103)**	0.40	0.32	0.32-1.1	ppm	Daily 2024	N	Water additive used to control microbes.

***In April 2024, a lowest level of 0.32 ppm of Chlorine was sampled at Entry Point ID 103, the minimum residual required by law is 0.40, the system was returned to a chlorine level of 0.45 when measured within the required timeframe on the same day.*

*We are required to monitor drinking water for disinfection byproducts on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2024, we were late in reporting EP Disinfectant Residual for Groundwater Rule. Compliance for this violation was achieved. You do not need to take any action at this time.

DETECTED SAMPLE RESULTS—HTWSA CENTRAL DISTRIBUTION

DISINFECTION BYPRODUCTS

Contaminant	MCL	MCLG	Level Detected	Range	Units	Year	Violation Y/N	Sources of Contamination
Arsenic	10	0	1.1875	0-3	ppb	2024	N	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production waste.
Barium	2	2	0.129	0.058-0.2	ppm	2024	N	Discharge from drilling wastes, discharge from metal refineries, erosion of natural deposits
Fluoride	2	2	0.27	0-0.27	ppm	2024	N	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
Nitrate	10	10	1.15	0-1.15	ppm	2024	N	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Chlorine (In System)	MRDL =4	MRD-LG=4	1.68	0.23-1.68	ppm	2024	N	Water additive used to control microbes

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

IMPORTANT NOTICE — Wipes and Personal Hygiene Products Clog Sewer Lines!

Unfortunately, many household products are labeled and marketed as DISPOSABLE and/or FLUSHABLE; many baby and adult personal hygiene products, along with household wipes and cleaning towelettes are labeled both disposable and flushable. While these products may be marketed as a convenience item in this way, the truth is that these types of items have the ability to clog and stop up not only the sewer line on your property, but can also cause blockage and service problems in the public sewer system and pump stations.

Unlike toilet paper, these products DO NOT break down once they are flushed and can lead to an expensive repair to the sewer line on your property.

On a larger scale, when these products make their way into the public sewer system they collect together, causing very large obstructions and clogs in the main collector lines and pump stations; which can lead to costly repairs and or replacement of equipment.

What We All Can Do To Help

The following should NEVER be flushed into the sewer system:

Disinfecting/surface wipes, Baby wipes, Jewelry wipes, Cosmetic wipes, Disposable diapers or liners, Cotton swabs, Toilet cleaning pads, Mop or Swiffer type refills, Paper Towels, Pet care wipes, First Aid wipes, Bio-pads, Feminine hygiene products, Prophylactics, Any moist type towelette.

Simply put - Do NOT flush any consumer item that is not toilet paper.

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.

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.

Information about Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Information about Barium: While your drinking water meets EPA's standard for barium, it does contain low levels of barium. EPA's standard balances the current understanding of barium's possible health effects against the costs of removing barium from drinking water. The EPA continues to research the health effects of low levels of barium which is a chemical known at high concentrations when consumed over many years to have adverse health effects such as increase in blood pressure in humans.

Information about Fluoride: While your drinking water meets EPA's standard for fluoride, it does contain low levels of fluoride. EPA's standard balances the current understanding of fluoride's possible health effects against the costs of removing fluoride from drinking water. The EPA continues to research health effects of fluoride, fluoride in your drinking water may cause cosmetic dental problems that might affect children under nine years of age.

At low levels, fluoride can help prevent cavities, but children drinking water containing more than two milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). Dental fluorosis, in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth before they erupt from the gums. Drinking water containing more than four mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease

Information about Nitrate and Nitrite: Nitrate and nitrite in drinking water at levels above 10 ppm and 1 ppm, respectively, is a health risk for infants of less than six months of age. High nitrate and nitrite levels in drinking water can cause blue baby syndrome. Nitrate and nitrite 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.

Information about PFOA and PFOS: PFAS are a large class of man-made synthetic chemicals that were created in the 1930s and 1940s for use in many industrial and manufacturing applications. PFAS have been widely used for their unique properties that make products repel water, grease and stains, reduce friction and resist heat. Because of their unique chemical structure, PFAS readily dissolve in water and are mobile, are highly persistent in the environment and bioaccumulate in living organisms over time. PFAS are referred to as "forever chemicals," because they do not readily break down when exposed to air, water, or sunlight. The primary means of distribution of PFAS throughout the environment has been through the air, water, biosolids, food, landfill leachate and fire-fighting activities. Exposure to these chemicals is known to cause a number of adverse health effects in laboratory animals and in humans. Exposure can occur when fish caught in water contaminated with PFAS are eaten, foods packaged in PFAS coated materials are consumed, soil and dust polluted with PFAS are unintentionally ingested, or products made with PFAS chemicals are handled. Drinking water containing perfluorooctanoic acid (PFOA) in excess of MCL of 14 ng/L may cause adverse health effects including developmental effects (neurobehavioral and skeletal effects). Drinking water containing perfluorooctanesulfonic acid (PFOS) in excess of MCL of 18 ng/L may cause adverse health effects, including decreased immune response. *HTWSA is currently in the process of adding a PFAS treatment process to the HTWSA Water Treatment facility.*

Information about Lead: Lead can cause serious health problems, especially for pregnant women and young children. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Hilltown Water and Sewer Authority is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact HTWSA at 215-453-6065. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

A service line inventory has been prepared and can be accessed at...

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.

Other Contaminants Tested But Not Detected: Total Coliform Presence, Nitrite, and Vinyl Chloride

Secondary Contaminant Testing: EPA has established National Secondary Drinking Water Regulations (NSDWRs) that set non-mandatory water quality standards for 15 contaminants. EPA does not enforce these "secondary maximum contaminant levels" (SMCLs). They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL. The table to the right summarizes selected testing for Secondary Contaminants which has been performed on your water.

Contaminant	SMCL	Level Detected	Units	Noticeable Effects Above SMCL
Manganese	0.05	0-0.06	ppm	Black to brown color; black staining; bitter, metallic taste
Iron	0.3	0-0.05	ppm	Rusty color, sediment, metallic taste, reddish or orange staining
Zinc (2021)	5	0-0.0069	ppm	Metallic taste

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 2024, 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

DETECTED SAMPLE RESULTS—HTWSA SOUTHERN DISTRIBUTION

INORGANIC CONTAMINANTS

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Range of Detections	Units	# of Sites Above AL	Violation of TT Y/N	Sources of Contamination
Copper (2022)	1.3	1.3	0.17	0.07-0.17	ppm	0 of 5	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2022)	15	0	2.21	0-3.1	ppb	0 of 20	N	Corrosion of household plumbing systems; erosion of natural desposits
Contaminant	MCL	MCLG	Level Detected	Range	Units		Violation Y/N	Sources of Contamination
Chlorine (In System)	MRD L =4	MRD-LG=4	1.51	0.69-1.51	ppm		N	Water additive used to control microbes.

DISINFECTION BYPRODUCTS

Contaminant	MCL	MCLG	Level Detected	Range	Units	Year	Violation Y/N	Sources of Contamination
Haloacetic Acids (HAA5)	60	n/a	15.7	15.7	ppb	2024	N	Byproduct of drinking water disinfection
Monochloroacetic Acid (HAA)	60	n/a	2.1	2.1	ppb	2024	N	Byproduct of drinking water disinfection
Trichloroacetic Acid (HAA)	60	n/a	8.6	7	ppb	2024	N	Byproduct of drinking water disinfection
Dichloroacetic Acid (HAA)	60	n/a	2.6	6.7	ppb	2024	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	80	n/a	55.2	55.2	ppb	2024	N	Byproduct of drinking water chlorination
Bromodichloromethane (THM)	80	n/a	8.6	8.6	ppb	2024	N	Byproduct of drinking water disinfection
Chlorodibromomethane (THM)	80	n/a	2.8	2.8	ppb	2024	N	Byproduct of drinking water disinfection
Chloroform (THM)	80	n/a	43.8	43.8	ppb	2024	N	Byproduct of drinking water disinfection

Other Contaminants Tested But Not Detected: Fecal Coliform Bacteria.

*We are required to monitor drinking water for disinfection byproducts on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2024, we were late in reporting Chlorine samples during the fourth quarter. Compliance for this violation was achieved. All results of samples taken were below the minimum allowable level; you do not need to take any actions at this time.

Key to Tables

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.

pCi/L - picocurries per liter (a measure of radioactivity)

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.

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

North Penn Water Authority – PWSID 1460034

2025 Annual Drinking Water Quality Report

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.

Owners of multiple family dwellings, commercial businesses, public housing, or similar situations, are encouraged to post and/or distribute this report. Additional copies are available and can be obtained at North Penn Water Authority's operations center or by calling (215) 855-3617.

This report is also available online at npwa.org.

Water System Information:

North Penn Water Authority (NPWA) is pleased to present to you this year's Annual Drinking Water Quality Report. This report summarizes the quality of water NPWA provided in 2024. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (US EPA) and Pennsylvania Department of Environmental Protection (PA DEP) state standards. We are committed to providing you with information because informed customers are our best allies. The Authority's staff of professionals is dedicated to ensuring that our customers receive a safe, economical, and continuous supply of water.

It is important for our valued customers to be informed about their water quality. If you have any questions about this report or regarding your water utility, please contact Shana Constanzer, Public Relations Coordinator, at **(215) 855-3617** or visit our website at **npwa.org**. If you want to learn more about NPWA, please attend any of our regularly scheduled Board of Directors meetings. Meetings are held on **the fourth Tuesday of every month at the Authority's operations center located at 300 Forty Foot Road, near the intersection of Forty Foot and Allentown Roads in Towamencin Township. Meetings begin at 7:00 p.m.**

Sources of Water:

In 2024, approximately 98% of the water that NPWA delivered to its customers was treated surface water from the Forest Park Water Treatment Plant (FPWTP) located in Chalfont. The source of water that is treated at Forest Park Water is the North Branch Neshaminy Creek. 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 Lake Galena continues to flow down the Neshaminy Creek to the FPWTP, in Chalfont, Pennsylvania. Due to the 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, Pennsylvania. 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 2% of water came from four groundwater supply wells that NPWA operates. These wells are located throughout our service territory, in Bucks and Montgomery Counties. The water from these wells is chlorinated before it is delivered to our customers' homes. As of June 1, 2024, 100% of the water that NPWA delivered to its customers was treated surface water from the Forest Park Water Treatment Plant.

A Source Water Assessment of the North Branch Neshaminy Creek Intake, which supplies water to the Forest Park Water Treatment Plant, was completed and prepared by Spotts, Steven & McCoy, Inc. for the PA DEP. The Assessment found that the North Branch Neshaminy Creek Intake is potentially most 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 potential sources are related to accidental release of a variety of materials along transportation corridors and high nutrients from Lake Galena. FPWTP 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 us 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 drinking water quality.

A Source Water Assessment of our groundwater sources was completed by the PA DEP. 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 our 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: **https://greenport.pa.gov/elibrary/GetFolder?FolderID=4490.** Complete reports were 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.

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. United States Environmental Protection Agency (US EPA) / Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the ***Safe Drinking Water Hotline*** **(800-426-4791).**

Monitoring Your Water:

NPWA 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, 2024**. As you review these tables, you will notice that NPWA water meets or exceeds all primary state and federal Drinking Water Act standards. The US EPA and PA DEP allow 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 sample results tables.

Definitions:

In the following tables, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following 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 contamination.
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.
NTU: Nephelometric turbidity unit is a measure of the clarity of water.
N/A: Not Applicable
pCi/L: picocuries per liter (a measure of radioactivity)
ppm: parts per million, or milligrams per liter (mg/L) – 1 ppm corresponds to 1 second in 11.5 days
ppb: parts per billion, or micrograms per liter (μg/L) – 1 ppb corresponds to 1 second in 32 years
ppt: parts per trillion, or nanograms per liter (ng/L) – 1 ppt corresponds to 1 second in 32,000 years

DETECTED SAMPLE RESULTS

North Penn Water Authority – PWSID 1460034

Table includes results for Forest Park Water Treatment Plant (FP), and North Penn Water Authority Wells (Wells)
As of June 1, 2024 – 100% of Water Delivered to NPWA Customers was from Forest Park Water Treatment Plant (FP)

Chemical Contaminants

Contaminant	MCL	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Yes/No	Sources of Contamination
Bromate *(monitored at FP only)*	10	0	6.2	0 – 6.2	ppb	2024	No	By-product of drinking water chlorination
Arsenic	10	0	0 *(FP)* 3 *(Wells)*	0 *(FP)* 0 – 3 *(Wells)*	ppb	2024	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2	2	0.016 *(FP)* 0.261 *(Wells)*	0.016 *(FP)* 0.071 – 0.261 *(Wells)*	ppm	2024	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2	2	0.109 *(FP)* 0.105 *(Wells)*	0.109 *(FP)* 0 - 0.105 *(Wells)*	ppm	2024	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nickel	N/A	N/A	0 *(FP)* 1 *(Wells)*	0 *(FP)* 0 – 1 *(Wells)*	ppb	2024	No	Erosion of natural deposits; By-product of various industrial processes
	While water suppliers continue to monitor nickel levels in water, there is currently no EPA maximum contaminant level (MCL) for nickel in drinking water. EPA is reconsidering the limit on nickel.							
Nitrate	10	10	0.726 *(FP)* 3.23 *(Wells)*	0.282 – 0.726 *(FP)* 0.160 – 3.23 *(Wells)*	ppm	2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perfluorooctanoic acid (PFOA)[a]	14	8	2.7[b] *(FP)* 4.87[b] *(Wells)*	0 – 2.9 *(FP)* 3.11 – 6.16 *(Wells)*	ppt	2024	No	Discharge from manufacturing facilities and runoff from land use activities
Perfluorooctanesulfonic acid (PFOS)[a]	18	14	0[b] *(FP)* 3.63[b] *(Wells)*	0 *(FP)* 2.69 – 4.13 *(Wells)*	ppt	2024	No	
Alpha Emitters	15	0	0 *(FP)* 8.26 *(Wells)*	0 *(FP)* 8.26 *(Wells)*	pCi/L	2023	No	Erosion of natural deposits
Combined Radium *(Radium 226 and 228)*	5	0	0 *(FP)* 1.55 *(Wells)*	0 *(FP)* 0 – 1.55 *(Wells)*	pCi/L	2020 and 2023	No	
Combined Uranium	30	0	0 *(FP)* 5.13 *(Wells)*	0 *(FP)* 2.32 - 5.13 *(Wells)*	µg/L	2023	No	

[a]In January 2023, PA DEP established enforceable drinking water standards in Pennsylvania for PFOA and PFOS. The results in this table are from PA DEP compliance monitoring.
[b]Compliance is based on a running annual average of quarterly results. This value represents the highest running annual average result, not a single sample result.

Disinfection By-Products *(Monitored in the Distribution System)*								
Contaminant	MCL	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Yes/No	Sources of Contamination
Haloacetic Acids (HAAs)[a]	60	N/A	21.0[c]	0 – 27.2	ppb	2024	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)[b]	80	N/A	33.4[c]	10.4 – 60.1	ppb	2024	No	By-product of drinking water chlorination

[a]HAAs: The sum of dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, and trichloroacetic acid
[b]TTHMs: The sum of bromoform, bromodichloromethane, chlorodibromomethane, and chloroform
[c]Compliance is based on a running annual average of quarterly results. This value represents the highest running annual average result, not a single sample result.

Distribution Disinfectant Residual								
Contaminant	MRDL	MRDLG	Highest Monthly Average Result	Range of Monthly Average Results	Units	Sample Date	Violation Yes/No	Sources of Contamination
Chlorine	4	4	1.34	1.09 - 1.34	ppm	2024	No	Water additive used to control microbes

As a member of the Partnership for Safe Water's Distribution System Optimization Program (DSOP), our goal is to achieve distribution chlorine residual levels ≥ 0.20 mg/L and ≤ 4.0 mg/L. In 2024, we accomplished this. 100% of all samples met this goal.

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual Required	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Yes/No	Sources of Contamination
Chlorine *(Wells)*	0.40	0.45	0.45 – 1.31	ppm	2024	No	Water additive used to control microbes
Chlorine (*FP*)	0.20	1.44	1.44 – 1.79	ppm	2024	No	

Turbidity at Forest Park Water Treatment Plant (FP)							
Contaminant	MCL	MCLG	Highest Level Detected	Range of Detections	Sample Date	Violation Yes/No	Sources of Contamination
Turbidity	TT=1 NTU for a single measurement	N/A	0.05	0.02 – 0.05	2024	No	Soil runoff
	TT= at least 95% of monthly samples less than or equal to 0.3 NTU	N/A	100%	N/A	2024	No	

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system. As a member of the Partnership for Safe Drinking Water, our goal is to achieve <0.1 NTU. In 2024, we accomplished this. 100% of all samples were <0.1 NTU.

Lead and Copper – *Tested at Customers' Taps from 6/1/2022 – 9/30/2022*								
Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Range of Sampling Results	Units	Number of Samples Above AL	Violation Yes/No	Sources of Contamination
Lead	*90% of homes must test less than 15 ppb*	0	1	0 - 15	ppb	0 out of 31	No	Corrosion of household plumbing systems
Copper	*90% of homes must test less than 1.3 ppm*	1.3	0.278	0 – 0.787	ppm	0 out of 31	No	

Unregulated Per- and polyfluoroalkyl Substances (PFAS) at NPWA Wells – PA DEP State Monitoring					
Contaminant	Average Level Detected	Range of Detections	Units	Sample Date	Sources of Contamination
Perfluorobutanesulfonic acid (PFBS)	1.85	0 – 3.66	ppt	2024	Discharge from manufacturing facilities and runoff from land use activities
Perfluorohexanesulfonic acid (PFHxS)	Less than reporting limit	0 – 1.72	ppt	2024	
Perfluorononanoic acid (PFNA)	Less than reporting limit	0 – 1.07	ppt	2024	
Perfluorobutanoic acid (PFBA)	2.56	0 – 4.84	ppt	2024	
Perfluorohexanoic acid (PFHxA)	1.90	0 – 2.68	ppt	2024	
Perfluoropentanoic acid (PFPeA)	2.74	2.00 -3.39	ppt	2024	

EPA Unregulated Contaminant Monitoring

Unregulated contaminants are those, for which the United States Environmental Protection Agency (US EPA) has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. From April 2024 to February 2025, Unregulated Contaminant Monitoring Rule 5 (UCMR 5) sampling was conducted at the Forest Park Water Treatment Plant (FP), and NPWA active wells. UCMR 5 specifies monitoring for 29 per- and polyfluoroalkyl substances (PFAS) and lithium. The results of this monitoring are listed in the tables below. UCMR 5 monitoring is still on-going at the Forest Park Water Treatment Plant until May 2025. The results of May 2025 monitoring will be reported in next year's Water Quality Report, however, if you are interested in those results prior to the publishing of our Water Quality Report in 2026, please contact Shana Constanzer, Public Relations Coordinator, at **(215) 855-3617. For more information concerning Unregulated Contaminant Monitoring, visit these websites: https://www.epa.gov/dwucmr or https://drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR**

UCMR 5 – Forest Park Water Treatment Plant – 4/2024 – 2/2025
All samples were non-detect for all 29 per- and polyfluoroalkyl substances (PFAS) and lithium.

UCMR 5 – NPWA Wells					
Contaminant	Average Level Detected	Range of Detections	Units	Sample Date	Sources of Contamination
Lithium	13.0	9.43 – 23.6	ppb	4/2024 and 10/2024	Naturally occurring metal that may concentrate in brine waters; lithium salts are used as pharmaceuticals, used in electrochemical cells, batteries, and in organic syntheses
Perfluorobutanesulfonic acid (PFBS)	<3.0 *(less than reporting limit)*	0 – 4.0	ppt	4/2024 and 10/2024	PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications including: non-stick cookware, water-repellent clothing, stain-resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil.
Perfluorohexanoic acid (PFHxA)	<3.0 *(less than reporting limit)*	0 – 3.0	ppt	4/2024 and 10/2024	
Perfluorooctanoic acid (PFOA)	<4.0 *(less than reporting limit)*	0 – 5.1	ppt	4/2024 and 10/2024	
Perfluoropentanoic acid (PFPeA)	<3.0 *(less than reporting limit)*	0 – 3.4	ppt	4/2024 and 10/2024	

UCMR 5 Parameters NOT Detected at NPWA Wells	
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	perfluorododecanoic acid (PFDoA)
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	perfluoroheptanesulfonic acid (PFHpS)
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	perfluoroheptanoic acid (PFHpA)
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	perfluorohexanesulfonic acid (PFHxS)
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	perfluorononanoic acid (PFNA)
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	perfluorooctanesulfonic acid (PFOS)
hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX)	perfluoropentanesulfonic acid (PFPeS)
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	perfluoroundecanoic acid (PFUnA)
perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
perfluoro-3-methoxypropanoic acid (PFMPA)	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
perfluoro-4-methoxybutanoic acid (PFMBA)	perfluorotetradecanoic acid (PFTA)
perfluorobutanoic acid (PFBA)	perfluorotridecanoic acid (PFTrDA)
perfluorodecanoic acid (PFDA)	

Below is a list of parameters that NPWA monitored for in 2024 but DID NOT DETECT:

Microbiological Parameters
E. Coli
Total Coliform Bacteria
Cryptosporidium - monitored in source water at Forest Park Water Treatment Plant

Inorganic Chemicals (IOCs)				
Antimony	Cadmium	Cyanide	Nitrite	Thallium
Beryllium	Chromium	Mercury	Selenium	

Synthetic Organic Chemicals (SOCs) Monitored at Forest Park Water Treatment Plant in 2024	
Atrazine	Pentachlorophenol

Volatile Organic Chemicals (VOCs)		
1,1,1-Trichloroethane	o-Dichlorobenzene	Styrene
1,1,2-Trichloroethane	Benzene	Tetrachloroethylene
1,1-Dichloroethylene	Carbon tetrachloride	Toluene
1,2,4-Trichlorobenzene	Chlorobenzene	trans-1,2-Dichloroethylene
p-Dichlorobenzene	cis-1,2-Dichloroethylene	Trichloroethylene
1,2-Dichloroethane	Dichloromethane	Vinyl Chloride
1,2-Dichloropropane	Ethylbenzene	Xylenes, total

Per- and polyfluoroalkyl Substances (PFAS) - NOT Detected - PA DEP Monitoring	
Forest Park Water	
Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)
Perfluorobutanesulfonic acid (PFBS)	Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX)
Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)
NPWA Wells	
Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX)	1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	Perfluoro-3-methoxypropanoic acid (PFMPA)
9-Chlorohexadecafluoro-3-oxanonane-a-sulfonic acid (9Cl-PF3ONS)	Perfluoro-4-methoxybutanoic acid (PFMBA)
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	Perfluoropentanesulfonic acid (PFPeS)
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	Perfluoroundecanoic acid (PFUnA)
Perfluorodecanoic acid (PFDA)	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
Perfluorododecanoic acid (PFDoA)	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	Perfluorotetradecanoic acid (PFTA)
Perfluoroheptanesulfonic acid (PFHpS)	Perfluorotridecanoic acid (PFTrDA)
Perfluoroheptanoic acid (PFHpA)	

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 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 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 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 prescribe 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 the 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:

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. North Penn Water Authority is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact North Penn Water Authority at 215-855-3617. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at **http://www.epa.gov/safewater/lead**.

As part of our continued compliance with EPA's Lead and Copper Rule Revisions (LCRR), North Penn Water Authority prepared a service line inventory that includes the type of material contained in each service line in our distribution system. This inventory can be accessed online at **https://npwa.org/service-line-inventory** or by contacting our office at 215-855-3617.

A service line is the piping that connects your household or building plumbing to the water main in the street. Ownership varies by water system but is typically split between the water system and the customer. North Penn Water Authority owns the section of the service line from the water main to the curb stop located near the curb or street line, while the section from the curb stop to inside the premises, including all internal plumbing is owned by the customer. NPWA seeks your assistance in identifying the material of the service line entering your home or business. Accurate information about the service line material will enable NPWA to have a comprehensive inventory, as mandated by EPA's LCRR. To complete a form identifying the water service line material in your home or business go to **https://npwa.org/service-line-inventory** or contact our office at 215-855-3617.

Information about Arsenic:

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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.

Cryptosporidium and Giardia:

Cryptosporidium and *Giardia* are microbial pathogens found in surface water throughout the United States. In 2024, Forest Park Water monitored the North Branch Neshaminy Creek source water (before treatment) for *Cryptosporidium and Giardia*. Four rounds of sampling were conducted. *Cryptosporidium* was **not detected** in any of the 4 samples collected. *Giardia* was detected in 1 out of 4 samples collected. Although Forest Park Water treatment process includes filtration to remove *Cryptosporidium and Giardia*, the most commonly-used filtration methods cannot guarantee 100 percent 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* and/or *Giardia may cause* abdominal infections called *cryptosporidiosis or giardiasis*. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at a greater risk of developing life-threatening illness. NPWA encourages immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium and Giardia* must be ingested to cause disease, and they may be spread through means other than drinking water.

How NPWA Is Protecting the Water You Drink

Lead in drinking water typically comes from the corrosion of drinking water service lines and household plumbing materials. Lead is typically not present in drinking water sources like rivers and groundwater. NPWA and FPWTP add orthophosphate to the water during the treatment process. Orthophosphate acts as a corrosion inhibitor by forming a protective film on the interior of pipes. This film protects the pipe material from the corrosive effects of water, which reduces/eliminates the potential for lead leaching into the water. The typical phosphate levels found in a liter of drinking water are about one hundred times lower than the phosphate levels found in the average American diet. For example, a person would have to drink ten to fifteen liters of water to equal the amount of phosphates in just one can of soda. People concerned about their health and phosphates added as a corrosion inhibitor to the drinking water, should contact their medical care provider.

To enhance water quality, NPWA performs an annual hydrant flushing program which takes place in the spring of each year. This flushing program helps improve water quality by removing any possible build-up of mineral deposits from the inside of water distribution pipes. NPWA also has an aggressive water main replacement program to improve the quality of water that we deliver to our customers. Old unlined cast iron mains, that can affect water quality and restrict flow, are replaced on a regular basis. These projects are scheduled when the Pennsylvania Department of Transportation (Penn DOT) or our member municipalities are doing work on the roads to reduce inconvenience to the community.

NPWA's Wellhead Protection (WHP) Program, approved by the PA DEP, meets the requirements for a local WHP Program in accordance with the Pennsylvania Safe Drinking Water Regulations. The WHP Program provides valuable information to the

Authority such as: identifying the protection zone around each well, identifying potential sources of contamination for each well, identifying the land areas around our wells, and the underground geologic layers, that are within the pumping zones of influence. This information will greatly assist the Authority in dealing with emergency response in case of a hazardous spill event that could threaten the well, so that remedial measures could be put in place. Also, implementation of contingency planning could involve revisions to local land use practices, if necessary, to protect the integrity of the groundwater supply.

Since 2011, NPWA has voluntarily participated in the American Water Works Association's (AWWA) Distribution System Optimization Program (DSOP). This program is part of AWWA's Partnership for Safe Water whose objective is to implement preventative programs that focus on optimizing treatment performance and distribution system operations. In 2022, NPWA was honored with the 5-year Director's Award for its efforts with the DSOP. NPWA received the award for successfully completing a comprehensive self-assessment of water distribution system operations for the last five years. The assessment involves an evaluation of distribution system operations and performance, including factors such as chlorine residuals, pressure levels and frequency of water main breaks, which on average, are much lower than the national average and the DSOP requirements. NPWA became the first public water utility in Pennsylvania and among the first in North America to receive the Director's Award in 2017. NPWA works hard to go above and beyond the required regulatory standards for drinking water and is proud to provide our customers with reliable, high quality water 24 hours a day, seven days a week.

Forest Park Water

Forest Park is a state of the art water treatment facility that combines conventional treatment processes with advanced techniques, which include ozone disinfection and membrane filtration. Membrane filtration is a leading-edge technology capable of consistently producing very high quality water and ensures the plant can safely meet the more stringent federal and state water quality regulations that will be required in the near future. This combination of traditional and innovative water treatment allows Forest Park to produce the safest, highest quality water possible. In 2024, the American Water Works Association's Partnership for Safe Water Program awarded Forest Park Water Treatment Plant (FPWTP) with the President's Award for the 12th straight year. The President's Award recognizes the achievement of very stringent performance goals, signifying the outstanding operations and maintenance practices at this high-performing water treatment plant. The FPWTP has been involved in the Partnership for Safe Water since 1995 and is a Directors Award recipient since 2002.

In 2024, for the 17th consecutive year, Forest Park received the prestigious Area-Wide Optimization Award (AWOP) presented by the Pennsylvania Department of Environmental Protection (PA DEP). The award recognizes outstanding efforts toward optimizing water treatment performance. AWOP is a national filter plant optimization effort among numerous states, the US EPA, and the Association of State Drinking Water Administrators (ASDWA).