

# Annual Drinking Water Quality Report

## Pine Hill Borough MUA

For the Year 2023, Results from the Year 2022

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is wells. Our three wells draw groundwater from the Mt. Laurel-Wenonah and Potomac-Raritan-Magothy (PRM) Aquifers. The wells range in depth from 165' to 670' feet. We also purchase 210 GPD of water from New Jersey American Water Company. New Jersey American Water draws water from the Delaware River in Delran and well water from its wells in Burlington and Camden Counties

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for these public water systems, which are available at [www.state.nj.us/dep/swap/](http://www.state.nj.us/dep/swap/) or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550. We have included the Susceptibility Ratings summary table for Pine Hill Borough MUA (PHMUA) Sources.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

EPA requires monitoring for over 80 drinking water contaminants. Those contaminants listed in the tables are the only contaminants detected in your water. The Pine Hill Borough MUA and the New Jersey American Water Company routinely monitor for contaminants in your drinking water according to Federal and State laws. This tables show the results of that monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2022. 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, though representative, are more than one year old.

Pine Hill MUA Test Results						
PWS ID# NJ0428002						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source of Contamination
<b>Radioactive Contaminants:</b>						
Combined Radium 228 & 226 Test results Yr 2020	N	range 1.5 - 2.9 Highest detect 2.9 pCi/l	pCi/l	n/a	5	Erosion of natural deposits
Gross Alpha Test results Yr 2020	N	3	pCi/l	n/a	15	Erosion of natural deposits
<b>Inorganic Contaminants:</b>						
Arsenic Test Results Yr 2020	N	ND	ppb	n/a	5	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium Test result yr 2020	N	Range = 0.26 - 0.075 Highest detect = 0.08	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Test results Yr 2021 Result at 90th Percentile	N	Range -0.29 - 032 No samples exceed the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride Test results Yr 2020	N	Range = 0.4 - 0.7	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Test results Yr 2021 Result at 90th Percentile	N	Range 0.1 - 15 No samples exceed the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrates Test result yr 2022	N	ND	ppm	10	10	Runoff for fertilizer use, leakage from septic tanks sewerage
Asbestos Test year 2022	N	1	mfl		7	Likely source of contamination decay of asbestos cement water mains. Erosion of natural deposits.
<b>Secondary Contaminants:</b>						
Iron Test result yr 2022 Distribution System Sample	N	13	ppm	0.3	RUL	Erosion of natural deposits.
Manganese Test result yr 2022 Distribution System Sample	N	0.0072	ppm		0.5 RUL	Erosion of natural deposits.

<b>Individual Contaminants:</b>						
Perfluorooctane Acids (PFAS) Test year 2020	N	ND	ppb	0.013		Man made chemicals used in non stick cookware, water & stain resistant fabrics, fire fighting foam High levels of PFA's may impact the immune system kidneys, and reproductive.
Perfluorooctanoic Acid (PFOA) Test year 2020	N	ND	ppb	0.013		
Perfluorononanoic Acid (PFNA) Test year 2020	N	ND	ppb	0.013		
1,2,3 Trichloropropane Test year 2020	N	ND	ppb	0.3		Used in soil fumigants, banned in the 1990's. Short term exposure may cause eye & throat irritation.
Ethylene DiBromide Test year 2020	N	ND	ppb	0.3		Used as a chemical in the synthesis of resins,waxes, gums, dyes. May cause headaches & depression.
<b>Disinfection By-Products:</b>						
Total Trihalomethanes (TTHM) Test year 2022	N	Range 5-7 ppb average 5 ppb	ppb	NA	80	By product of disinfection suspected of causing cancer and reproductive outcomes.
Haloacetic Acids (HAAS) Test year 2022	N	Range 0-1 ppb average 0.3 ppb	ppb	NA	60	By product of disinfection . May increase risk of certain cancers.
<b>Regulated Disinfectants:</b>						
Chlorine (Hypochlorite Sol 15%) Test year 2022	N	Range 0.20-0.50 ppm average residual 0.37ppm	ppm	4		Used for disinfection.
<b>UCMR#4 Unregulated Contam.</b>						
Anatoxin-A Test year 2020		<0.03	ppb			Part of Cyanotoxins Blue Green Algae
Cylindrospermopsin Test year 2020		<0.09	ppb			Part of Cyanotoxins Blue Green Algae
TTL Microcystins & Nodularius Test year 2020		<0.3	ppb			Part of Cyanotoxins Blue Green Algae.
						Note: Pine Hill MUA's second quarter TTHM/HAAS sampling was missed. It was scheduled to be taken between April 1, 2020 and June 30, 2020. Sampling was performed on July 7, 2020. This was result of scheduling error.

Total Haloacetic Acids (HAAS) and Total Trihalomethanes (TTHM) compliance is based on a Locational Running Annual Average (LRAA), calculated at each monitoring location. The LRAA calculation is based on four yearly quarters of results.

If you have any questions about this report or concerning your water utility, please contact our office at John Toal at 856-783-0739. We want our valued customers to be informed about their water utility. This Consumer Confidence Report can also be viewed on our website along with other valuable information pertaining to the PHMUA. Please log on to <http://www.phmua.com/>. If you want to learn more, please attend any of our regularly scheduled MUA monthly meetings held on the 3<sup>rd</sup> Wednesday at 7:30 PM, 907 Turnerville Road, Pine Hill, NJ 08021.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas projection, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff, and septic systems.

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

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration 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 at 1-800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Pine Hill Borough MUA and the New Jersey American Water Company are 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 is available from the Safe Drinking Water Hotline or online at <http://www.epa.gov/safewater/lead>.

#### **DEFINITIONS:**

In the following table 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:

#### **Million Fibers per Liter (mfl)**

**Parts per million** (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion** (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Non-Detects** (ND) - laboratory analysis indicates that the constituent is not present.

**Picocuries per liter** (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

**Action Level** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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** -The "Goal"(MCLG) is 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.

**Nephelometric Turbidity Unit** (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.

**Secondary Contaminant**- Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

**Recommended Upper Limit** (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as taste or appearance. RUL's are recommendations, not mandates.

**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.

**Total Organic Carbon** – Total Organ Carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection byproducts. The *Treatment Technique* for TOC requires that 35% - 45% of the TOC in the raw water is removed through the treatment processes.

**Turbidity** – Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium microbial growth. Turbidity is measured as an indication of the effectiveness of the filtration process. The *Treatment Technique* for turbidity requires that no individual sample exceeds 1 NTU and 95% of the samples collected during the month must be less than 0.3 NTU.

The Susceptibility Ratings table provides the number of wells that rated high (H), medium (M), or low (L) for each contaminant category. **If a system is rated highly susceptible for contaminant category, it does not mean a customer is consuming contaminated drinking water.** The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels.

*The following definitions may help you when reading the Susceptibility Ratings Table:*

**Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

**Nutrients:** Compounds, minerals and elements that aid growth, that are naturally occurring and man-made. Examples include nitrogen and phosphorus.

**Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

**Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

**Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

**Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

**Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment.

For more information go to <http://www.nj.gov/dep/rpp/radon/index.htm> or call (800) 648-0394.

**Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectant (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

Pine Hill Borough MUA Susceptibility Ratings for Water Sources																									
Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compound			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors			
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	
Wells - 5		2	3	2		3			5	1		4	2	2	1	2	2	1		3	2		5		

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our system received a monitoring waiver synthetic organic chemical.

We at Pine Hill MUA work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future by continuing to follow the **mandatory odd/even restrictions** within the borough.

TELECOMMUNICATIONS DEVICE FOR THE DEAF (TTD) allows a deaf or speech impaired person to contact a Federal agency or program affiliate. Contact 1-800-852-7897.

Dominic Buirch, Executive Director