## Annual Drinking Water Quality Report Pine Hill Borough MUA

### For the Year 2017, Results from the Year 2016

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 five wells draw groundwater from the Cohansey, Mt. Laurel-Wenonah and Potomac-Raritan-Magothy (PRM) Aquifers. The wells range in depth from 80' to 670' feet. We also purchase water from New Jersey American Water. New Jersey American Water draws its 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 <u>www.state.nj.us/dep/swap/</u>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 *Crypotosporidium* 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. The tables show the results of that monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2016. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

| Pine Hill MUA Test Results |           |                         |             |      |        |  |  |  |  |  |
|----------------------------|-----------|-------------------------|-------------|------|--------|--|--|--|--|--|
| PWS ID# NJ0428002          |           |                         |             |      |        |  |  |  |  |  |
| Contaminant                | Violation | Level Detected          | Units of    | MCLG | MCL    | Likely Source of Contamination                   |  |  |  |  |
|                            | Y/N       |                         | Measurement |      |        |  |  |  |  |  |
| Radioactive Contaminants:  |           |                         |             |      |        |  |  |  |  |  |
| Combined Radium            | Ν         | 3.8                     | pCi/l       | n/a  | 5      | Erosion of natural deposits                      |  |  |  |  |
| 228 & 226                  |           |                         |             |      |        |  |  |  |  |  |
| Gross Alpha                | N         | 3.8                     | nCi/l       | n/a  | 15     | Erosion of natural denosits                      |  |  |  |  |
| Tost rosults Vr 2014       |           | 5.0                     | pel/i       | ny u | 15     |  |  |  |  |  |
|                            |           |                         |             |      |        |  |  |  |  |  |
| Inorganic Contaminants:    |           |                         |             |      |        | Erosion of natural denosits: runoff from         |  |  |  |  |
| Arsenic                    | N         | Range = 0.2 - 0.3       | ppb         | n/a  | 5      | orchards;  |  |  |  |  |
|                            |           | Highest detect = 0.3    |             |      |        | runoff from glass and electronics production     |  |  |  |  |
| Test Results Yr 2014       |           |                         |             |      |        | wastes   |  |  |  |  |
| Barium                     | N         | Range = $0.02 - 0.08$   | npm         | 2    | 2      | metal  |  |  |  |  |
| Test results Yr 2014       |           | Highest detect = 0.08   | P           | -    | -      | refineries; erosion of natural deposits          |  |  |  |  |
| Copper                     | N         | 0.28                    | ppm         | 1.3  | AL=1.3 | Corrosion of household plumbing systems;         |  |  |  |  |
| Test results Yr 2015       |           | No samples exceed       |             |      |        | erosion of natural deposits                      |  |  |  |  |
| Result at 90th Percentile  |           | the action level        |             |      |        |  |  |  |  |  |
| Fluoride                   | Ν         | Range = 0.2 - 0.5       | ppm         | 4    | 4      | Erosion of natural deposits; water additive      |  |  |  |  |
| Test results Yr 2014       |           | Highest detect = 0.5    |             |      |        | which promotes strong teeth; discharge from      |  |  |  |  |
|                            |           |                         |             |      |        | fertilizer and aluminum factories                |  |  |  |  |
| Lead                       | Ν         | < 1                     | ppb         | 0    | AL=15  | Corrosion of household plumbing systems,         |  |  |  |  |
| Test results Yr 2015       |           | No samples exceed       |             |      |        | erosion of natural deposits                      |  |  |  |  |
| Result at 90th Percentile  |           | the action level        |             |      |        |  |  |  |  |  |
| Mercury (inorganic)        | Ν         | Range = 0.07-0.09       | ppb         | 2    | 2      | Erosion of natural deposits; discharge from      |  |  |  |  |
| Test results Yr 2014       |           | Highest detect = 0.09   |             |      |        | refineries and factories; runoff from landfills; |  |  |  |  |
| Nieleel                    | N         | Deres 0.2.04            | a a b       |      |        | runott trom cropland                             |  |  |  |  |
|                            | IN        | Range = 0.2 - 0.4       | aqq         | n/a  | n/a    | Erosion of natural deposits                      |  |  |  |  |
| Test results Yr 2014       | N         | Highest detect = $0.4$  | nnh         | 50   | 50     | Discharge from netroloum and metal refineries:   |  |  |  |  |
| Seleman                    | IN        | Ralige - 0.2 - 0.0      | hhp         | 50   | 50     | erosion of natural deposits; discharge from      |  |  |  |  |
| Test results Yr 2014       |           | Highest detect = 0.6    |             |      |        | mines  |  |  |  |  |
| Nitrate                    | N         | Highest detect = < 0.01 | ppm         | 10   | 10     | Runoff from fertilizer use; leaking from septic  |  |  |  |  |
| Test results 2015          |           |                         |             |      |        | tanks, sewerage                                  |  |  |  |  |
| Cyanide                    | Ν         | Highest detect = 3.7    | ppb         | 200  | 200    | Discharge from steel/metal factories and         |  |  |  |  |
| Test results 2014          |           |                         |             |      |        | discharge from plastic and fertilizer factories  |  |  |  |  |
| Cadium                     | Ν         | Highest detect = 0.03   | ppb         | 5    | 5      | Corrosion of galvanized pipes, runoff from waste |  |  |  |  |
| Test results 2014          |           |                         |             |      |        | batteries, paints and metal factories            |  |  |  |  |

| Contaminants              | Violation | Level Detected    | Units of    | MC  | MCL | Likely Source of Contamination            |  |  |
|---------------------------|-----------|-------------------|-------------|-----|-----|---|--|--|
|                           | Y/N       |                   | Measurement | LG  |     |   |  |  |
| Disinfection By-Products: |           |                   |             |     |     |   |  |  |
| ТТНМ                      | N         | Range = 0.7 - 16  | ppb         | n/a | 80  | By-product of drinking water disinfection |  |  |
| Total Trihalomethanes     |           | Highest LRAA = 9  |             |     |     |   |  |  |
| Test results Yr 2015      |           |                   |             |     |     |   |  |  |
| HAA5                      | N         | Range = 0.54 - 3  | ppb         | n/a | 60  | By-product of drinking water disinfection |  |  |
| Haloacetic Acids          |           | Highest LRAA = 2  |             |     |     |   |  |  |
| Test results Yr 2015      |           |                   |             |     |     |   |  |  |
|                           |           |                   |             |     |     |   |  |  |
| Regulated Disinfectants   |           | Level Detected    | MRDL        |     |     | MRDLG                                     |  |  |
| Chlorine                  |           | Average = 0.1 ppm | 4.0 ppm     |     |     | 4.0 ppm                                   |  |  |

Total Haloacetic Acids (HAA5) 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 856-783-0739 or our Operations Manager John Toal at 856-783-5524. 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 <u>http://www.phmua.org/</u>. 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 amount 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:**

The following definitions may help you better understand the terms and abbreviations found in our Contaminations Table:

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.

<u>Secondary Contaminant</u> – 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.

<u>Total Organic Carbon</u> – Total Organic 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.

<u>Turbidity</u> – 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.

<u>Pesticides:</u> 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 mad-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

|           | Pathogens | Nutrients | Pesticides | Volatile<br>Organic<br>Compound | Inorganics | Radionuclides | Radon | Disinfection<br>Byproduct<br>Precursors |
|-----------|-----------|-----------|------------|---------------------------------|------------|---------------|-------|---|
| Sources   | HML       | HML       | HML        | HML                             | HML        | HML           | HML   | HML                                     |
| Wells - 5 | 23        | 2 3       | 5          | 1 4                             | 2 2 1      | 2 2 1         | 32    | 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 for synthetic organic chemicals.

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 <u>mandatory odd/even restrictions</u> 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.

Debra Corson, Executive Director

PINE HILL MUA 907 Turnerville Road Pine Hill, NJ 08021

Important Information About Your Drinking Water

LABEL

# MANDATORY **ODD/EVEN WATER RESTRICTION** REMAINS IN EFFECT Water Saving Tips

- Don't over water your lawn. Only water every three to five days in the summer and every 10-14 days in the winter as needed.
- Don't water your lawn during the hottest part of the day or when it is windy.
- Keep outside water taps off when not is use.
- Only run the dishwasher and clothes washer when they are fully loaded.
- Use a broom, rather than a hose, to clean sidewalks and driveways.
- Install automatic shut off nozzles on all your watering hoses.
- Defrost frozen food in the refrigerator or in the microwave instead of running water over it.
- If you have a swimming pool, get a cover. You'll cut the loss of water evaporation by 90 percent.
- Repair dripping faucets and leaky toilets. Dripping faucets can waste about 2,000 gallons of water each year.
- Leaky toilets can waste as much as 200 gallons each day. Consider replacing your toilet if it was made before 1992. Newer toilets are built to be water conservation friendly.
- Install a flow control showerhead. Consider taking showers instead of baths or bathe in a half full tub.
- Never leave water running unnecessarily when brushing teeth, washing dishes by hand, or similar tasks.

WATER IS PRECIOUS SO PLEASE DON'T WASTE IT !!