

TOWNSHIP OF

Parsippany-Troy Hills



1001 Parsippany Boulevard
Parsippany, New Jersey 07054 • (973)263-7099

WATER DEPARTMENT
John Wieworka
Water Superintendent

March 23, 2020

To All Township Residents:

Re: Annual Consumer Confidence Report 2020

The Township of Parsippany-Troy Hills feels it is important to inform residents of the quality of our drinking water and the system that delivers the water.

Attached are the results of the 2020 Consumer Confidence Report. Residents can access this report electronically in the following ways:

- There is a direct link/URL printed on customer water bills.
- There is a link on the Township's web site (www.parsippany.net).
- We advertise the availability of the CCR in the newspaper with a link to the web site.

Hardcopies may be obtained the following ways:

- In public places (Water Dept., Libraries, Town Hall, Health Dept., Community Center)
- We provide hardcopies to Nursing Homes, Daycare Facilities, Private Schools and the School District.
- We provide hardcopies to non-billed customers (i.e., apartment buildings).
- We advertise the availability of the CCR in the newspaper.
- We mail hardcopies upon request.

Should you have any questions or concerns, please reach out to me at (973) 263-7082 or by email at jwieworka@parsippany.net.

Sincerely,

John Wieworka
Water Superintendent

**TOWNSHIP OF PARSIPPANY-TROY HILLS
WATER DEPARTMENT**

CONSUMER CONFIDENCE REPORT 2020



CONSUMER CONFIDENCE REPORT 2020

Township of Parsippany-Troy Hills

PWSID # NJ1429001

January 1, 2019 through December 31, 2019

Introduction

The Township of Parsippany-Troy Hills (PTH) Water Department is pleased to present you with its annual Consumer Confidence Report. The purpose of this report is to provide the consumers of the Township of Parsippany-Troy Hills with a greater understanding of the quality of our drinking water and the system that delivers the water from the source to the user. This report contains information about the PTH Water System, addresses the many biological issues of water in general, and provides 2019 water monitoring information displaying the high quality and reliability of Parsippany's water.

The water for the Township of Parsippany-Troy Hills is derived from 19 active ground water wells, located within the Township. For those who reside to the east of I-287, the Jersey City Reservoir at Boonton now supplements the Township's water supply in the summer months. A copy of the Jersey City MUA water quality table is included in this report.

If you have any questions about this report or your water utility, please contact Superintendent John Wieworka at (973) 263-7099. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any regularly scheduled Township Council Meeting located at Town Hall, 1001 Parsippany Blvd., Parsippany, New Jersey. Meetings are generally held every third Tuesday of the month. All meetings begin at 7:30 PM in the council chambers. Further information can be obtained from the Township's web page at www.parsippany.net.

Parsippany's Source Water Assessment

The New Jersey Department of Environmental Protection has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at www.state.nj.us/dep/swap or by contacting the Bureau of Safe Drinking Water at (609) 292-5550. Listed below is a brief summary of this report.

The Township of Parsippany-Troy Hills Water Department is a public community water system consisting of 19 wells, zero wells under the influence of surface water, zero surface water intakes, one purchased ground water source and one purchased surface water source.

Parsippany's source water comes from the following aquifer(s) and/or surface water body(s): Glacial sand and gravel aquifer.

Parsippany has emergency interconnections with the following water system(s): Township of Boonton, Township of Denville and the Borough of Mountain Lakes.

Purchased Surface Water Source: Jersey City Municipal Utilities Authority via the Jersey City Reservoir.

Susceptibility Ratings for Township of Parsippany-Troy Hills Water Department Sources

The table on the next page illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The contaminant categories are defined on the next page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes susceptibility to radionuclides was not determined and they all received a low rating.

Continued Susceptibility Ratings for the Township of Parsippany-Troy Hills Water Department Sources

| Sources | Pathogens | | | Nutrients | | | Pesticides | | | Volatile Organic Compounds | | | Inorganics | | | Radionuclides | | | Radon | | | Disinfection Byproducts 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 -19 | | 16 | 3 | 19 | | | | 5 | 14 | 19 | | | 14 | 5 | | 4 | 15 | | 19 | | | 6 | 13 | |
| GUDI -0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Water - 0 | | | | | | | | | | | | | | | | | | | | | | | | |

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be 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 concentration above allowable levels.

Definitions

- **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 both 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 disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

Water Quality

To ensure that the water serving the community is of the highest quality, the PTH Water Department monitors and tests for physical, chemical, and bacterial contaminants in the water. The contaminants are monitored and regulated by the New Jersey Department of Environmental Protection and the USEPA. Water samples are obtained at selected Township wells and within selected locations of the distribution system. The samples are collected and forwarded to certified accredited laboratories that are required to report the results of the tests to the NJDEP and indicate if a high level was detected.

The sources of drinking water (both tap 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 areas.
- 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 stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the results 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.

Aesthetic qualities, such as odor, taste, hardness and appearance, are also monitored by the Township. These qualities are tested as secondary standards, since they impose no harmful impact on health. They cover minerals and nutrients such as Iron, Manganese, and Sodium. These secondary standards do not pose a health risk to healthy individuals. They can cause aesthetic problems such as taste, odor or visual appearance. The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.

Waivers

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for Asbestos, Volatile Organic Compounds, and Synthetic Organic Chemicals. Our system received monitoring waivers for two of these contaminants (Asbestos and Synthetic Organic Chemicals).

Special Considerations Regarding Children

Children may receive a slightly higher amount of a contaminant, present in the water, than do adults (on a body weight basis) because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent to account for additional uncertainties regarding these effects. In the cases of Lead and Nitrates the effects on infants and children are considered health endpoints upon which the standards are based.

Detected Contaminants

All drinking water, including bottled spring water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Contaminants detected in the Township's water system are shown on the next page within a table listing the contamination level. The data shown in this table reflects sampling performed in 2016 and representative testing performed in previous years. In this table you will find many terms and abbreviations you may not be familiar with. To help you better understand these terms, we have 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.
- **Not Applicable (N/A)**
- **Non Detects (ND)**: Laboratory analysis indicates that the contaminant is not present.
- **No Standard (NS)**

- **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 (ug/L)**: One part per billion - corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Parts per Trillion (ppt) or Nanograms per Liter (ng/L)**: One part per trillion - corresponds to one second in 32,000 years, or a single penny in \$10,000,000,000.
- **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.
- **Picocuries per Liter (pCi/L)**: Picocuries per liter is a measure of the radioactivity in water.
- **Maximum Residual Disinfectant Level (MRDL)**: The highest level of a disinfectant allowed in drinking water.
- **Maximum Residual Disinfectant Level Goal (MRDLG)**: The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectant to control microbial contamination.
- **Locational Running Annual Average (LRAA)**: The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

As noted previously, the presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA or DEP Safe Drinking Water Hotline (telephone numbers shown later).

Any questions regarding the list of contaminants tested or any other issue regarding testing can be directed to the PTH Water Department (telephone number's shown later).

Health Effects Language

Iron

The recommended upper limit for iron is based on the unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The PTH Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Manganese

Manganese is a naturally-occurring element that can be found ubiquitously in the air, soil and water. Manganese is an essential nutrient for humans and animals. Adverse health effects can be caused by inadequate intake or over exposure. Manganese deficiency in humans is thought to be rare because manganese is present in many common foods. The EPA recommends a concentration of manganese in drinking water not to exceed 0.05 mg/L to avoid staining of clothing and fixtures and is believed to be more than adequate to protect human health.

Sodium

For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet; however, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Other Facts About Drinking Water

In general, testing indicated that the Township's water contains hardness concentrations higher than the recommended level. Hardness is a relative measure of calcium and other minerals that naturally occur in water. Hard water has no impact on the health quality of the water, but the hard water affects the ability of the water to produce suds from soaps and detergents. Hard water also creates deposits in hot water heaters and plumbing. The hardness of our water is approximately 18 grains per gallon.

Security

The PTH Water Department in conjunction with the Mayor's Office and the PTH Police Department has taken up additional security measures in light of the events of 9/11. **We ask that if you see anything suspicious or someone tampering with the water system to please report it immediately.**

Township of Parsippany-Troy Hills Public Water System Notice

Important Information About Your Drinking Water

The Parsippany-Troy Hills Water Department Has Levels of Sodium and Manganese Above the Secondary Drinking Water Standards

In 2017 three well samples exceeded the recommended upper limit (RUL) for sodium in the drinking water. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do and what we are doing. We routinely monitor for the presence of secondary drinking water contaminants. Samples from September 13, 2017 exceeded the recommended upper limit for sodium. **The recommended upper limit for sodium is 50 milligrams per liter (mg/L).** The three samples exceeded the RUL with a reading of 57.3, 59.2 and 67.6 mg/L respectively. The remaining 8 samples were below the RUL. The range of results were from 11.5 mg/L to 67.6 mg/L.

In 2017 two well samples exceeded the recommended upper limit (RUL) for manganese in the drinking water. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do and what we are doing. We routinely monitor for the presence of secondary drinking water contaminants. Samples from September 13, 2017 exceeded the recommended upper limit for sodium. **The recommended upper limit for sodium is 0.05 milligrams per liter (mg/L).** The two samples exceeded the RUL with a reading of 0.058 and 0.051 mg/L respectively. The remaining 9 samples were below the RUL. The range of results were from non-detect to 0.058 mg/L.

What should you do?

No action is required. You do not need to use an alternative (e.g. bottled) water supply. However, if you have specific health concerns, consult your doctor.

What does this mean?

According to the DEP, for healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, elevated levels of sodium may be a concern for persons on a sodium restricted diet. Similarly, manganese intake from drinking water is normally substantially lower than intake from food. If you have concerns please consult your doctor.

What happened? What is being done?

Road salt run-off affecting our source water is the leading cause of elevated sodium levels in the drinking water supply. We are discussing options for minimizing its use with the Parsippany DPW and Rutgers Cooperative Extension Water Resources Program around the impacted well sites.

Manganese is a naturally-occurring element that can be found ubiquitously in the air, soil and water. We are working on lowering the concentration of manganese in the drinking water.

The Township of Parsippany-Troy Hills is committed to providing safe drinking water to all its residents and businesses and will continue to sample and monitor in accordance with federal and state standards. For more information, please call the Parsippany-Troy Hills Water Department at (973) 263-7099.

Please share this information with all the other people who use this water, especially those who may not have received it directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or by distributing copies by hand or mail.

Township of Parsippany - Troy Hills Water Quality Data

TABLE OF DETECTED PRIMARY CONTAMINANTS (2019 DATA OR AS NOTED) PWSID # NJ1429001

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). *Cryptosporidium* is a microscopic parasite that can be found in surface water, such as rivers and lakes. It is found in feces of humans and many domestic and wild animals. Since the Township system obtains its water from groundwater resources, the Township is not at risk from this microbe. Tests on the Township's water supply did not reveal any traces of *Cryptosporidium* within the system.

| NAME OF CONTAMINANT | MCL | MCLG | RANGE DETECTED | HIGHEST LEVEL DETECTED | MEETS STANDARD (YES/NO) | MAJOR SOURCES IN DRINKING WATER | AVERAGE OF ALL SAMPLES | RUNNING ANNUAL AVERAGE (RAA) | LOCATIONAL RUNNING ANNUAL AVG. (LRAA) | SITES EXCEEDING |
|---|-----------------------|----------|----------------|------------------------|-------------------------|--|------------------------|------------------------------|---------------------------------------|-----------------|
| VOLATILE ORGANIC COMPOUNDS (VOC) | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE (ppb) | 30 | 26 | ND - 0.50 | 0.50 | YES | Discharge from metal degreasing sites and other factories. | 0.08 | N/A | N/A | N/A |
| INORGANIC CONTAMINANTS (2017 DATA) | | | | | | | | | | |
| ARSENIC (ppb) | 5 | 0 | ND - 1 | 1.00 | YES | Erosion of natural deposits. Runoff from orchards, glass and electronics production waste. | 0.91 | N/A | N/A | N/A |
| BARIUM (ppm) | 2 | 2 | 0.019 - 0.099 | 0.10 | YES | Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits. | 0.041 | N/A | N/A | N/A |
| CHROMIUM (ppb) | 100 | 100 | 1 - 2 | 2.00 | YES | Discharge from steel and pulp mills. Erosion of natural deposits. | 1.09 | N/A | N/A | N/A |
| FLUORIDE (ppm) | 4 | 4 | 0.08 - 0.12 | 0.12 | YES | Erosion of natural deposits. | 0.1 | N/A | N/A | N/A |
| NICKEL (ppb) | NO MCL | NO MCLG | ND - 9 | 9.00 | YES | Metal finishing And plating process. Erosion of natural deposits. | 0.82 | N/A | N/A | N/A |
| LEAD (ppb) (2019 Data) | AL=15 ** | 0 | N/A | N/A | YES | Corrosion of household plumbing system. Erosion of natural deposits. | N/A | 90th Percentile = 4.0* | N/A | 1 |
| COPPER (ppm) (2019 Data) | AL=1.3 ** | 1.3 | N/A | N/A | YES | Corrosion of household plumbing systems. Erosion of natural deposits. | N/A | 90th Percentile = 0.301* | N/A | 0 |
| NITRATE (ppm)*** (2019 Data) | 10 | 10 | 0.768 - 1.62 | 1.62 | YES | Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits. | 0.987 | N/A | N/A | N/A |
| SULFATE (ppm) | 250 | 250 | 22.5 - 35.1 | 35.10 | YES | Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits. | 29.99 | N/A | N/A | N/A |
| DISINFECTION BY-PRODUCTS (DBP) | | | | | | | | | | |
| TOTAL TRIHALOMETHANE (ppb) STAGE 2 | 80 | N/A | 2.6 - 72.2 | 72.20 | YES | Treatment process; by-products of drinking water disinfection. | N/A | N/A | 42.5 | N/A |
| HALOACETIC ACIDS 5 (ppb) STAGE 2 | 60 | N/A | ND - 54.2 | 54.20 | YES | Treatment process; by-products of drinking water disinfection. | N/A | N/A | 27.7 | N/A |
| MICROBIOLOGICAL CONTAMINANTS | | | | | | | | | | |
| TOTAL COLIFORMS (% in monthly samples) | 5% of Monthly Samples | 0 | ND | ND | YES | Naturally present in the environment. | N/A | N/A | N/A | N/A |
| DISINFECTION RESIDUAL | | | | | | | | | | |
| CHLORINE (ppm) | MRDL= 4 | MRDLG= 4 | 0.49 - 0.53 | 0.53 | YES | Water additive used to control microbes. | N/A | 0.52 | N/A | N/A |
| RADIONUCLIDES (2014 DATA) | | | | | | | | | | |
| GROSS ALPHA (pCi/L) | 15 | 0 | 1.87 - 4.85 | | YES | Erosion of natural deposits. | 3.01 | N/A | N/A | N/A |
| COMBINED RADIUM 226/228 (pCi/L) | 5 | 0 | -0.27 - 1.27 | | YES | Erosion of natural deposits. | 0.33 | N/A | N/A | N/A |
| URANIUM (ppb) | 30 | 0 | 0.62 - 2.84 | | YES | Erosion of natural deposits. | 1.64 | N/A | N/A | N/A |
| UNREGULATED SUBSTANCES | | | | | | | | | | |
| MANGANESE (ppb) | NO MCL | NO MCLG | 0 - 162 | 162.00 | N/A | | 16.281 | N/A | N/A | N/A |
| QUINOLINE (ppb) | NO MCL | NO MCLG | 0 - 0.033 | 0.033 | N/A | | 0.003 | N/A | N/A | N/A |
| BROMOCHLOROACETIC ACID (ppb) | NO MCL | NO MCLG | 0 - 2.71 | 2.710 | N/A | | 0.985 | N/A | N/A | N/A |
| BROMODICHLOROACETIC ACID (ppb) | NO MCL | NO MCLG | 0 - 5.22 | 5.220 | N/A | | 1.753 | N/A | N/A | N/A |
| CHLORODIBROMOACETIC ACID (ppb) | NO MCL | NO MCLG | 0 - 1.31 | 1.310 | N/A | | 0.464 | N/A | N/A | N/A |
| DIBROMOACETIC ACID (ppb) | NO MCL | NO MCLG | 0 - 1.9 | 1.900 | N/A | | 0.824 | N/A | N/A | N/A |
| DICHLOROACETIC ACID (ppb) | NO MCL | NO MCLG | 0 - 7.77 | 7.770 | N/A | | 1.673 | N/A | N/A | N/A |
| TRICHLOROACETIC ACID (ppb) | NO MCL | NO MCLG | 0 - 16 | 16.000 | N/A | | 2.701 | N/A | N/A | N/A |
| 1,4-DIOXANE (ppb) | NO MCL | NO MCLG | 0.18 - 0.22 | 0.220 | N/A | | 0.2 | N/A | N/A | N/A |
| SECONDARY STANDARDS (2017 DATA) No MCL or MCLG for Secondary Standards - Only Recommended Upper Limits (RUL) | | | | | | | | | | |
| RUL | | | | | | | | | | |
| SODIUM (ppm) | 50 | N/A | 11.5 - 67.6 | 67.6 | N/A | Erosion of natural deposits; roadway salting. | 40.63 | N/A | N/A | N/A |
| MANGANESE (ppb) | 50 | N/A | ND - 58 | 58 | N/A | Erosion of natural deposits. | 11 | N/A | N/A | N/A |
| TOTAL DISSOLVED SOLIDS (ppm) | 500 | N/A | 356 - 706 | 706 | N/A | Erosion of natural deposits. | 549 | N/A | N/A | N/A |
| TOTAL HARDNESS (ppm) | 250 | N/A | 236 - 377 | 377 | N/A | Erosion of natural deposits. | 316 | N/A | N/A | N/A |

* The 90th Percentile means the 90% value for Lead or Copper when all samples are arranged from lowest to highest readings.

** There is no MCL or MCLG for Lead and Copper. They do, however, have recommended Action Levels (AL) as shown.

*** See *Important Information About Your Drinking Water* in this report regarding Nitrate sampling.

The Parsippany-Troy Hills Water Department routinely monitors for contaminants in your drinking water according to Federal and State Laws. This table shows the results of our monitoring for the period of January 1, 2019 to December 31, 2019 (unless otherwise noted).

Sodium and Manganese - We exceeded the Recommended Upper Limit (RUL) for sodium and manganese at a number of our wells. Please refer to our Public Water System Notice contained in this report for more information.

Secondary Standards - Substances that do not have an impact on health. Secondary standards 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. RUL's are recommendations, not mandates.

**Suez & Jersey City MUA Water Quality Data
Jersey City Reservoir at Boonton
PWSID # NJ0906001**

January 1, 2019 through December 31, 2019

REGULATED CONTAMINANTS

| INORGANIC CONTAMINANTS | MCLG | MCL | Min. | Max. | Average | Violation | Likely Source | |
|--|-------|--------------|--------------------|-----------------------------------|---------------------|-----------|--|--|
| ARSENIC (ppb) | 0 | 5 | 0.63 | 0.63 | 0.63 | No | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes | |
| BARIUM (ppm) | 2 | 2 | 0.02 | 0.02 | 0.02 | No | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries. | |
| CHROMIUM (total) (ppb) | 100 | 100 | 1 | 1 | 1 | No | Discharge from steel and pulp mills; erosion of natural deposits. | |
| NITRATE AS NITROGEN (ppm) | 10 | 10 | 0.14 | 0.48 | 0.31 | No | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits. | |
| TOTAL NITRATE AND NITRITE (ppm) | 10 | 10 | 0.14 | 0.80 | 0.31 | No | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits. | |
| LEAD AND COPPER | MCLG | Action Level | 90th Percentile | No. of Samples Above Action Level | | Violation | Likely Source | |
| LEAD (ppb) | 0 | 15 | 4.13 | 1 | | No | Corrosion of household plumbing system. Erosion of natural deposits. | |
| COPPER (ppm) | 1.3 | 1.3 | 0.12 | 0 | | No | Corrosion of household plumbing. | |
| WATER QUALITY PARAMETERS Boonton WTP POE (TP001002) | MCLG | | | Min. | Max. | | | |
| pH (pH Unit) | NA | | | 7.00 | 7.33 | | | |
| ORTHOPHOSPHATE (ppm) | NA | | | 0.79 | 1.08 | | | |
| Distribution System | | | | | | | | |
| pH (pH Unit) | NA | | | 7.24 | 7.47 | | | |
| ALKALINITY (mg/L as CaCO3) | | | | | 36.00 | 84.00 | | |
| ORTHOPHOSPHATE (ppm) | NA | | | 0.54 | 1.20 | | | |
| TURBIDITY | MCLG | MCL | Min. | Max. | %>0.3 | Violation | Likely Source | |
| TURBIDITY (NTU) | N/A | TT | 0.05 | 0.21 | 0.00% | No | Soil runoff. | |
| MICROBIOLOGICAL | MCLG | MCL | | | Range of Detections | Violation | Likely Source | |
| TOTAL COLIFORMS | 0 | 0 | | | 0% - 2% | No | Naturally present in the environment. | |
| DISINFECTION RESIDUALS | MRDLG | MRDL | Min. | Max. | RAA | Violation | Likely Source | |
| CHLORINE (ppm) | 4.0 | 4.0 | 0.06 | 1.39 | 0.85 | No | Water additive used to control microbes. | |
| STAGE 2 DISINFECTION BY-PRODUCTS | MCLG | MCL | Min. | Max. | RAA | Violation | Likely Source | |
| TOTAL TRIHALOMETHANES (ppb) | NA | 80 | 24.53 | 82.46 | 66.2 | No | By-product of disinfection. | |
| HALOACETIC ACIDS (ppb) | NA | 60 | ND | 53.9 | 36.14 | No | By-product of disinfection. | |
| RADIONUCLIDES (2014 Data) | MCLG | MCL | Highest Result RAA | Range of Results | | Violation | Likely Source | |
| COMBINED RADIUM 228+226 (pCi/L) | 0 | 5 | 0.14 | NA | | No | Erosion of natural deposits. | |

SECONDARY STANDARDS (Water Quality Parameters Related to the Aesthetic Quality of Drinking Water)

| SECONDARY STANDARDS | RUL | Range of Results | Exceeded? | Likely Source |
|------------------------------|-----------|------------------|-----------|---|
| ALUMINUM (ppm) | 0.2 | ND - 0.06 | No | Naturally occurring element. |
| CALCIUM (ppm) | N/A | 14 - 25 | No | Naturally occurring element. |
| CHLORIDE (ppm) | 250 | 64 - 142 | No | Naturally occurring element. |
| CONDUCTIVITY (umhos) | N/A | 317 - 562 | No | Natural property of water. |
| HARDNESS (as CaCO3) (ppm) | 250 | 62 - 93 | No | Naturally occurring element. |
| IRON (ppm) | 0.3 | ND - 0.04 | No | Naturally occurring element, leaching from metal pipes. |
| pH | 6.5 - 8.5 | 6.99 - 7.6 | No | Natural property of water. |
| SODIUM (ppm) | 50 | 35 - 74 | No | Naturally occurring element. |
| SULFATE (ppm) | 250 | NA - 8 | No | Naturally occurring element. |
| TOTAL DISSOLVED SOLIDS (ppm) | 500 | 149 - 300 | No | Minerals and salts dissolved in water. |
| ZINC (ppm) | 5 | ND - 0.05 | No | Naturally occurring element. |

Notes:

1. RAA = Running Annual Average.
2. Health Note for Sodium: Water containing more than 20 ppm of sodium should not be used for drinking water by people on diets that severely restrict sodium. Water containing more than 270 ppm of sodium should not be used for drinking by people on diets that moderately restrict sodium.

Definitions

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

CU: Color unit.

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 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 disinfectant to control microbial contamination.

NA: Not applicable.

ND: Not detected.

NJRUL: New Jersey Recommended Upper Limit.

NTU: Nephelometric Turbidity Unit.

ppb: Parts per billion.

ppm: Parts per million.

pCi/L: Picocuries per liter.

Primary Standards: Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.

Secondary Standards: Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor and appearance. Secondary standards are recommendations, not mandates.

TON: Threshold Odor Number.

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

Lawn Watering Restrictions

A reminder to all residents and businesses, permanent lawn watering restrictions are in effect from June 1st through September 30th, per the Township Water Conservation Ordinance. The limits on lawn watering are listed below.

- **Residential Lawn Watering:** Properties having an even number street address are only permitted to water on even number days from 5 AM - 9 AM and 5 PM - 9 PM. Residential properties having an odd number street address are only permitted to water on odd number days from 5 AM - 9 AM and 5 PM - 9 PM. **No watering is permitted on Fridays or on the 31st day of the month.**
- **Non-Residential Lawn Watering:** Watering is permitted only on Mondays and Thursdays, from 5 AM - 9 AM and 5 PM - 9 PM. **No watering is permitted on the 31st day of the month.**

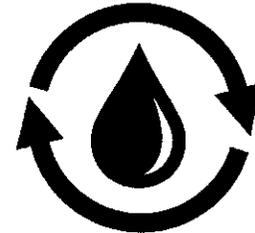


Water Conservation

We encourage our customers to use water wisely, even when supplies are abundant. If you don't conserve, you're pouring water, and money, down the drain. The average American can drink, shower, and flush between 40 and 130 gallons of water every day. You can reduce your water consumption by up to 25 % by taking just a few simple steps.

Here are some tips for conserving water inside your home:

- Turn off the tap when brushing your teeth.
- Never use your toilet as your wastebasket.
- Use a partially filled sink to rinse your razor.
- Take shorter showers or install water saving shower heads.
- Take a shallow bath instead of a shower.
- Chill tap water in the refrigerator for drinking.
- Run the washing machine and the dishwasher only with full loads.



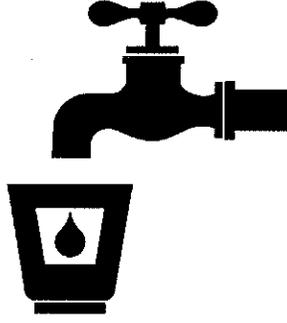
Here are some tips for conserving water outside your home:

- Use a broom, not a hose, to clear debris from sidewalks.
- Set your lawn mower one notch higher. Longer grass allows less evaporation.
- Make sure your hose has a shut off nozzle.
- Cover your pool to reduce evaporation.

Contact Numbers

We have provided in this report the necessary information for our customers to interpret and to rate for themselves our water quality. We realize; however, that all the numbers can be confusing. Therefore, should you have any questions or comments about this report, you can contact the following:

- PTH Water Superintendent John Wieworka (973) 263-7099
- PTH Health Department (973) 263-7160
- USEPA Safe Drinking Water Hotline (800) 426-4791
- NJDEP Bureau of Safe Drinking Water (609) 292-5550
- PTH Police Department (973) 263-4300 or 911 in an Emergency



For users of MCMUA water in the Puddingstone Area, consumer confidence reports from this utility are available at the PTH Water Department and will be forwarded to these users. We want all our valued customers to be informed about their Water Utility.

English

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Mandarin

這份報告是有關您飲水的重要資料。
請找人翻譯，或請懂的人解釋給您聽。

Gujarati

આ અહેવાલ મેં તમારા પીવાના પાણી વિષે
સાચાની જાણ કરી આપવા માં આવી છે.
આનો અનુવાદ કરી વ્યક્તિ જેને સમજાણ પડતી
હોય તેના આર્થે વાત કરો

Summation

The Township is not content with simply providing water to all its residents and businesses. The PTH Water Department is constantly improving its system to enhance the water quality, reinforce the supply of water, and upgrade the distribution of water throughout the system. In its effort to educate the consumer, the goal of this report is to provide proof that the Township's water quality consistently meets the strict standards set forth by the regulations. This in turn should provide the residents of the Township assurance of their water safety. Thank you for helping the Township with providing clean, quality water during the past year.