

Haddon Township Water Department

PWSID#: 0416001

Welcome to the 2017 Water Quality Report

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 of our 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 continually improve the water treatment process along with protecting our water resources. We are committed to ensuring the quality of your water. For more information or questions, please call James Stevenson, Haddon Township's Public Works Director, at 856-833-6260. We encourage public participation at our regular commissioner's meetings which are held every fourth Tuesday of each month at 7:00 pm. The location of the meetings is at the Haddon Township Municipal Building at 135 Haddon Avenue Haddon Township NJ 08108.

The drinking water Haddon Township processes comes from four (4) ground water wells which are located in Haddon Township. These wells range from approximately 400 to 450 feet deep in a water bearing aquifer known as the Potomac-Raritan-Magothy. Haddon Township owns the land around these wells and restricts any activity that could pose contamination of the underground water source.

The total water diversion allocated for Haddon Township can not exceed the base allocation of 369 million gallons per year. The NJ Department of Environmental Protection requires Haddon Township to purchase any additional water from NJ American Water Company. Most of the water received from NJ American Water comes from the Potomac-Raritan-Magothy Aquifer; however, some of this ground water may be mixed with surface water received from the Delaware River Regional Water Treatment Plant in Cinnaminson NJ.

Our Water Treatment Plant Consists of:

Aeration: The process of bringing air into contact with the water in order to remove dissolved gases which may be corrosive to our water supply.

Sedimentation: The process of removing suspended solids by gravity settling.

Filtration: Removal of the remaining suspended solids by passing the water through a sand media supported by layers of crushed gravel.

Corrosion Control: The addition of a zinc phosphate is added to control scaling and deposits that form in the water lines.

Disinfection: Chlorine is added to the water prior to entering the water distribution system.

Haddon Township's water storage facilities have a total capacity of 2 million gallons. These include a 1 million gallon elevated tower, 750,000 gallon standpipe, and 250,000 gallon standpipe.

As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled water, may be reasonably expected to contain at least some small amounts of some constituent. It's important to remember that the presence of these constituents does not necessarily pose a health risk. The Haddon Township Water Department routinely monitors for these constituents in your drinking water according to federal and state laws. 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 monitoring waivers for all of these types of contaminants.

Source Water Assessments:

The New Jersey Department of Environmental Protection has completed and issued the Source Water Assessment Report and Summary for Haddon Township.

The Source Water Assessment was performed on all of our ground water wells # 1A thru #5. A susceptibility rating was used for the wells in Haddon Township. These ratings ranged from low, medium or high for a particular category.

The information on Haddon Township's Source Water Protection Program can be obtained by logging onto NJDEP's source water website at www.state.nj.us/dep/swap/ or by contacting NJDEP Bureau of Safe Drinking Water at 609-292-5550.

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 production, 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.

NJ American Water Company

To comply with state and federal regulations, New Jersey American Water issues an annual Consumer Confidence Report describing the quality of the drinking water supplied to Haddon Township.

If you have any questions about the drinking water that New Jersey American Water supplies, please call their Customer Service Center toll-free at 1-800-NJ-AM-WTR (1-800-652-6987).

This report can also be viewed on the New Jersey American Water Co. Website at address:

http://www.amwater.com/awpr/njaw/your_water/yw1400.html

Special Consideration regarding Children, Pregnant Women, Nursing Mothers, and Others

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 weight than do adults. For this reason, reproductive or developmental effects are used for calculating 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 nitrate, effects on infants and children are the health endpoints upon which the standards are based.

Nitrate: Nitrate in drinking water at levels above 10,000 ppb 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.

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home plumbing. If you are concerned about lead levels in your home water supply, you may wish to have your water tested. It is recommended to flush your water for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791) or <http://www.epa.gov/safewater/lead>.

Educational Information Required By The EPA

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 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 (1-800-426-4791).

The New Jersey Department of Environmental Protection (NJDEP) is preparing Source Water Assessment Reports and Summaries for all public water systems, which have been completed. Further

information on the Source Water Assessment Program can be obtained by logging onto NJDEP's source water assessment website at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system at (856) 833-6260.

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

Manganese: 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.

For additional information contact:

NJDEP Bureau of Safe Drinking Water
(609) 292-5550

EPA Safe Drinking Water Hotline
(800) 426-4791

In the 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:

- Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.
- 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.
- Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
- Millirems per year (mrem/yr) - measure of radiation absorbed by the body.
- Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- 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.
- 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.
- Secondary Maximum Contaminant Level - (SMCL) Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Note: These results are from 2014, 2015 and 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.

MCL's are set at very stringent levels. To understand the possible health effects described

WATER QUALITY TABLE 2014, 2015 & 2016

Regulated at the point of entry to the water system

Inorganic Compound	Units	MCL	MCLG	Highest Detection	Range	Major Source	Violation
Sulfates	Ppm	250	500	4.2	4.2 to 4.2	Erosion of natural deposits	No
Nitrate	Ppm	10	10	.18	.18 to .18	Erosion of natural deposits	No

Regulated at Customers Tap and Well 1A Effluent Stage 2

Total-tri Halo-methane	Ppb	80	n/a	4.40	0 to 4.40	Bi-product of chlorination	No
Halo-acetic Acids	Ppb	40	n/a	ND	ND	Bi-product of chlorination	No

Regulated at Customer Tap Stage 1

Total-Tri-Halo-methane	Ppb	80	n/a	5.27	0 to 5.27	Bi-product of chlorination	No
Halo-acetic Acids	Ppb	40	n/a	ND	ND	Bi-product of chlorination	No

Regulated at Point of Entry to the Water System

	Units	MCL	MCLG	Highest Detection	Range	Major Source	Violation
Radio-nuclides							
Gross Alpha	pCi/L	15	0	3 >	3 >	Erosion of natural deposits	No
Radium 226 & 228	pCi/L	5	0	2.72	1.22 to 2.72	Erosion of natural deposits	No

Regulated at the Customer Tap

	Units	MCL	MCLG	Highest Detection	Range	Major Source	Violation
Lead	Ppb	0	0	6.2	0 to 6.72	Customer Plumbing and erosion of natural deposits	No
Copper	Ppm	1.3	1.3	.618	.02 to .618	Customer Plumbing and natural erosion of natural deposits	No

Secondary Compounds

	Units	MCL	MCLG	Highest Detection	Range	Major Source	Violation
Iron	Ppm	.30	n/a	ND	ND	Erosion of Natural deposits	No
Manganese	Ppm	.05	n/a	ND	ND	Erosion of Natural deposits	No

For many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Frequently Asked Questions:

Drinking water often looks cloudy when first taken from a faucet and then it clears up. Why is that?
The cloudy water is caused by tiny air bubbles in the water similar to the gas bubbles in beer and carbonated soft drinks. After a while, the bubbles rise to the top and dissipate. This type of cloudiness occurs more often in the winter when the drinking water is cold. Cloudy water can also occur if an aerator is clogged.

- Does drinking water contain calories, fat, sugar, caffeine, or cholesterol?

No!

- Should I be concerned about the chlorine in the water I use for bathing or showering?

No!

There are two reasons two reasons: (1) it will not be absorbed into the skin and get into your body; and (2) the amount of chlorine in the water is too low to harm the skin itself. There are some people, however, who seem to be allergic to chlorine and related compounds. This has been a problem in swimming pools. Whether this problem is caused by chlorine or chlorine reaction products is not known. If you have any trouble in swimming pools, remember that the amount of chlorine in swimming pool water is much greater than in tap water.

Water-Quality Footnotes

1. Haddon Township is required by the NJDEP to test for a minimum of (10) Coliform Bacteria per month at selective sampling sites throughout Haddon Township's water distribution system. Coliform bacteria samples were taken and tested by our certified lab in 2016. All samples tested negative in 2016.

2. Haddon Township tested Thirty One (31) lead and copper samples at selective locations throughout the Haddon Township water distribution system in 2015. Haddon Township met the Action Level which is set at the 90th percentile of the sample pool? The next round of sampling for lead and copper will be in 2018.
3. Haddon Township does not add fluoride to our Water Supply. Parents of young children may want to consult with their dentist about their need for Fluoride treatments.
4. Haddon Township was required to test for (1) set of Radionuclide compounds in 2014 at the water plant point of entry to the water system. The test results were below the limit set by New Jersey DEP. The next round of sampling will be in 2017.
5. Haddon Township is required to test for one nitrate annually. The results were well under the 10Ppm maximum lee.
6. Haddon Township is required by NJDEP to continue testing for Disinfectant Byproduct Compounds which were tested in 2014, 2015 & 2016. The test results on the table represent Stage 1 and Stage 2 sampling. The difference of each stage requires expanding sampling locations approved by NJDEP for the Stage 2 sites. All results were in compliance set by NJDEP in 2015.
7. Haddon Township is required by the USEPA to test for a series of Unregulated Contaminants known as UCMR 3. The analysis sampled at each point of entry and in the water system. The results will be posted on the EPA website and submitted to NJDEP. All sample results were non-detected in 2015.
8. Haddon Township tested a full scan of volatile organic compounds in 2014. All results were non-detected. The next round of sampling will be in 2017.
9. Haddon Township was required to take selected samples for Asbestos throughout the water system in 2013. The result of the analysis was non-detected.
10. Haddon Township was issued a waiver for Pesticides and Sythetic Organic Compounds for the 2011-2013 sampling cycle. The waiver was granted from information submitted to the NJDEP on potential health risk assessment of these contaminants. NJDEP is still in the process of evaluating Haddon Township water supply to determine the next waiver for these compunds.

The **water meter** is an important part of your water service. It measures the exact amount of water you use, and its readings serve as the basis for your water consumption charge.

These readings also allow us to compare total water use registered by all meters versus total water pumped from the wells. Variations in these figures could indicate underground leaks and unaccounted water usage.

You are billed for water consumption on a quarterly basis. The bill will reflect the previous three months of consumption and will include a quarterly service charge based on the size of your meter.

Facts About Water Usage:

Have you ever wondered how much water you use in the appliances around your home? The following list reflects the average daily water use of certain appliances and fixtures within the home.

Washing Machine	25-50	gallons
Bathtub	25-35	gallons
Dishwasher	15-30	gallons
Toilet	4-6	gallons
Shower	3-5	gallons (per minute)
Sink Faucet	2-3	gallons (per minute)
Outside Faucet	3-5	gallons (per minute)

Water Conservation Tips

- Fix leaking faucets & toilets: A single dripping faucet can waste hundreds, even thousands of gallons per year.
- On average, 50-70% of household water is used outdoors. Water lawns wisely and turn off the hose while washing the car.
- Conserve water by installing water saving shower heads.
- Turn off the faucet while brushing your teeth.

Haddon Township Water Dept.
504 Oneida Avenue
Haddon Township, NJ 08108

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Security:

The events of September 11 have refocused attention to the importance of our drinking water supplies throughout the United States. Haddon Township is making every effort to implement and develop plans to protect all aspects of the entire infrastructure while working closely with all the respected regulatory and enforcement agencies.

Capital Improvements:

Haddon Township has recently installed a security system to key infrastructure locations in Haddon Township.

A new high service pump was installed at the water plant to improve pumping performance and reduce energy consumption.

A new flow meter was installed at the water treatment plant to accurately determine water loss in the water distribution system.

There were upgrades to the existing chlorine system at the water treatment plant.

A new alarm monitoring system was installed that will improve water plant operations during emergency conditions.