



TOWNSHIP OF BOONTON

155 Powerville Road
Boonton Township, NJ 07005
PWSID # 1401002

2010 ANNUAL WATER-QUALITY REPORT TO CUSTOMERS

Dear Customer:

The Township of Boonton is providing to you our water quality report for 2010. The Safe Drinking Water Act (SDWA) requires that all water utilities issue an annual “consumer confidence” report to its customers.

Where does our drinking water come from?

Boonton Township Water Department purchases all of its supply from the Town of Boonton Water Department.

What is the water source?

The Town of Boonton supplies the Township of Boonton and they are supplied by surface water from Stoney Brook Reservoir in Montville Township. Also they withdraw ground water from four wells that are set in the stratified drift formation in Boonton Township. This water supply is part of a watershed known as the Hackensack-Passaic, which covers an area of about 1100 square miles.

To learn more about this water shed on the Internet go to locate your water shed
WWW.EPA.GOV/SURF2

Please be advised that the presence of certain compounds in drinking water does not necessarily indicate that it is a health risk.

BOONTON TOWNSHIP WATER DEPARTMENT
973-402-4003 or 973-402-4007
PWSID # 1401002

BOONTON TOWNSHIP HEALTH DEPARTMENT
973-402-4008

TOWN OF BOONTON WATER DEPARTMENT
973-402-9460

SAFE DRINKING WATER
HOT LINE
1-800-426-4791

N.J. BUREAU OF SAFE DRINKING WATER
1-609-292-5550

N.J.D.E.P. WEB SITE – www.state.nj.us/dep/watersupply

N.J.D.E.P. HOTLINE FOR QUESTIONS ABOUT DROUGHT RESTRICTIONS
1-800-448-7379

N.J.D.E.P. WEB SITE – <http://www.njdrought.org>.

HEALTH EFFECTS OF LEAD & COPPER

The United States Environmental Protection Agency (USEPA) the New Jersey Department of Environmental Protection and Energy (NJDEPE) and the Township of Boonton Water Department are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the USEPA action level of 15 parts per billion (ppb) or 0.015 milligrams of lead per liter of water (mg/L).

Lead is common, natural and often a useful metal found throughout the environment in lead-based paint, air, *soil*, household dust, food, and certain types of pottery, porcelain, and pewter and also in water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes in contact with sources of lead contamination-like dirt and dust-that rarely *affect* an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. People with Wilson's Disease should consult their personal doctor.

LEAD IN DRINKING WATER:

Lead in drinking water, although rarely the sole cause of lead poisoning can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up to 20 per cent or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in the water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipes, brass and chrome plated brass faucets, and in some cases pipes made of lead that connect your house to the water main (service line). In 1986 Congress banned the use of lead solder containing greater than 0.2 percent lead, and restricted the lead content of faucets, pipes, and other plumbing materials to 8.0 per cent and the State of New Jersey adopted it in February 1987.

When water stands in lead pipes or plumbing systems containing lead for several hours or more the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

WATER CONSERVATION

Water conservation will continue to be a priority in Boonton Township. Water conservation suggestions:

- Water lawns & gardens early in the morning
- Use mulch to retain moisture around trees and plants
- Repair leaky toilets, faucets and pipes
- Install water conserving plumbing fixtures
- When upgrading appliances or plumbing fixtures, choose models that conserve water

WHAT IS IN MY WATER?

The Township of Boonton conducts various tests of the public water supply. The following are the types and results:

1. Microbiological Analysis
Samples per month one (1) - total 12 per year required
0 – positive for total coliform
Samples 25 - none were positive for E. coli
2. Lead and Copper Analysis
Required 20 per year - 20 samples taken
 - a. No samples exceeded the action level for Lead. No samples exceeded the action level for lead. Typical source is corrosion of household plumbing, and lead solder or pipes. Elevated lead levels in water are a result of internal plumbing and not the water supply.
 - b. No samples exceeded the action level for copper.
3. Asbestos Analysis
Asbestos types – none detected
Total asbestos concentration < 0.07 fibers per liter
Asbestos concentration fibers > 10 microns 0.07 million fibers per liter
(Boonton Township has been issued a waiver. Sampled 9/30/2003)
4. Iron and Manganese Analysis

Iron	0.222	MCL	0.30
Manganese	<0.020	MCL	0.05
5. Corrosivity Analysis

PH tests	6.8 and 7.05	MCL	6.5 – 8.5
Total dissolved solids	194	MCL	500
CA hardness	42		
Total Alkalinity	34		

The following are the maximum contaminant levels (MCLS) for public drinking water supplies in NJ.

Microbiological	Total Coliform - 0
Lead	0.015 MG/L or 15 PPB
Copper	1.3 MG/L or 1300 PPB
Iron	0.3 MG/L
Manganese	0.05
Nitrates as Nitrogen	10.0

The secondary 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 found in drinking water.

The Town of Boonton samples the water supply for nitrate (as nitrogen). The MCL is 10.0. Their

highest detected level in 2010 was 0.5.

The Township of Boonton in 2010, sampled for volatile organic contaminants.

	Unit	MCL	MCLG	Samples Taken Quarterly		Major Source
				Average	Range	
TTHMs [Total Trihalomethanes]	ppb	80	n/a	30	<0.50 – 36.5	By-product of drinking water disinfection
HAA5 [Haloacetic Acids]	ppb	60	n/a	12	<0.50 – 10.3	By-product of drinking water disinfection

Town of Boonton

<u>Secondary Analyses</u>				<u>Range</u>	
Sulfate	ppm	250	n/a	17 – 29 ppm	Naturally present in the environment
Sodium	ppm	50	n/a	18.5 – 35.2 ppm	Naturally occurring mineral

Our goal with this report is to provide proof that the water quality meets the standards set for by the Safe Drinking Water Act. Please remember that this report is from our 2010 testing results. We will be providing a 2011 report in July 2012 as required by law.

STEPS YOU CAN TAKE IN THE HOME TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

Despite our best efforts mentioned earlier to control water corrosives and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water.

If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions:

Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer period of time, perhaps one minute. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush to wash the dishes or water the plants.

Try not to cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove. Do not use hot tap water for making baby formula.

Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced, by moving the faucet strainers from all taps and running the water from 3 to 5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1987, notify the plumber who did the work and request that he or she replace the lead solder with lead free solder. Lead solder looks dull gray, and when scratched with a key looks shiny.

Determine whether or not the service line that connects your home or apartment to the water main is made of lead. The best way to determine if your service line is made of lead is by hiring a licensed plumber to inspect the line. A licensed plumber can at the same time check to see if your home's plumbing contains lead solder.

Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards. The steps described above will reduce the lead concentration in your drinking water.

You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead.

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, and 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 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 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.

DEFINITION OF TERMS:

Action Level (AL) - The concentration of contaminant, which triggers a water treatment process.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed to be present in drinking water.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant, which will cause no known or expected risk to health.

Inorganic Compounds - Chemicals associated with minerals & metals.

MGIL - Milligrams per Liter **MCGIL** - Micrograms per Liter

ppb - Concentration in parts per billion

ppm - Concentration in parts per million

Primary Standards – Federal drinking water regulations that are health related.

Secondary Compounds - Federal drinking water measurements for substances that are not health related.

These are recommended levels and reflect aesthetic qualities of water.

The Boonton Township Water Department is providing you with this report. If you have any questions or comments we have provided you with the phone numbers of all of the agencies involved.

Please remember that the information provided is for 2010. The Town of Boonton, our bulk water supplier, conducts other water analyses and has a hydrant-flushing program to remove any sediment that may have collected in the water mains.

Our goal is to provide proof that our water quality consistently meets the standards as set forth by the Safe Drinking Water Act.

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.

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 you have any questions about this report or concerning your water utility, please contact Joseph Lowell, Boonton Township Water Operator at 973-402-4001 or Thomas J. Gilmartin, Senior Registered Environmental Health Specialist, at 973-402-4008. We want our valued customers to be informed about their water utility.

The Boonton Township Water Department routinely monitors for contaminants in your drinking water according to Federal and State laws. This report shows the results of our monitoring for the period of January 1ST to December 31st, 2010.

The Boonton Water Department, which supplies our water, was required to perform a susceptibility rating for their water source. The table below indicates their ratings.*

BOONTON WATER DEPARTMENT – PWSID # 1401001

Boonton Water Department is a public community water system consisting of 5 well(s), 0 wells under the influence of surface water, 1 surface water intake(s), 1 purchased ground water source(s), and 0 purchased surface water source(s).

This system's source water comes from the following aquifer(s) and/or surface water body(s) (if applicable): glacial sand and gravel, Taylortown Reservoir.

This system purchases water from the following water system(s) (if applicable): DENVILLE WD

Susceptibility Ratings for Boonton Water Department Sources

The table below 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 seven contaminant categories are defined at the bottom of this 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.

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 concentrations above allowable levels. As a result of the assessments, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings

Sources	Pathogens						Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Precursors		
	H	M	1	11	M	1.	11	M	1.	11	M	L	11	M	1.	11	M	L	11	M	L	H	M	L
	Wells - 5		5		5				5				5			5	5			3	2		1	4
GUDI - 0																								
Surface water intakes - 1					1																			

- **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.

* The Denville Water Department Interconnection is an emergency interconnection only. Water is not regularly purchased by Boonton Water Department from this source.