

# Annual Drinking Water Quality Report

Long Beach Township Water Department

Holgate

(Public Water System ID #1517002)

For the Year 2010, Data From Year 2009

This report is designed to inform you about the quality water and services we deliver to you every day. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. Our two wells draw their water from the Rio Grande Aquifer, over 450 feet deep. The New Jersey Department of Environmental Protection (NJDEP) has prepared and issued Source Water Assessment Reports and Summaries for all public water systems. Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP's source water assessment web site at [www.state.nj.us/dep/swap](http://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 (609) 361-1000 Ext.6669. This water system's susceptibility ratings and potential contaminant sources are attached.

## **We are pleased to inform you that our water is safe and meets all federal and state requirements.**

If you have any questions about this report or concerning your water utility, please contact Mark Shields at 609-361-1000, Ext. 6669. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Township Committee meetings at the municipal building 6805 Long Beach Boulevard, Brant Beach. Meetings are held on the first Friday of each month at 4:00 p.m. and the third Friday at 4:00 p.m.

The Long Beach Township Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1 to December 31, 2009. 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.

**Potential Sources of Contamination:** 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 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 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 stormwater 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.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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.

## **DEFINITIONS**

**In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have 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.

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

**Action Level (AL)** - 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 (MCL)** - 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 (MCLG)** -The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's 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 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination..

**Recommended Upper Limit (RUL)** - Recommended maximum concentration of secondary contaminants. RUL's are recommendations, not mandates.

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

The NJ DEP has issued us a waiver for synthetic organic (SOC'S) compounds/pesticides. This is based upon Hydrogeologic Evaluation. The NJ DEP has rated the susceptibility of the Holgate well as low.

**MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for seventy years to have a one-in-a-million chance of having the described health effect. As a precautionary measure, we chlorinate the water at the plant.**

As part of our water quality monitoring program, hundreds of quality tests are performed on our water each year. We test for over eighty individual contaminants, and perform additional daily monitoring at our water treatment facility, and throughout the water distribution system. The table below lists only contaminants that were detected in the water. All detections are at safe levels.

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

## TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Major sources in Drinking Water
<b>Radioactive Contaminants:</b>						
<i>Alpha emitters Test Results Yr. 2007</i>	No	1.57	pCi/l	0	15	Erosion of natural deposits
<b>Inorganic Contaminants:</b>						
<i>Copper Test Results Yr. 2009</i>	No	< 0.05 No samples out of 5 exceed the action level	Mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
<i>Lead Test Results Yr. 2009</i>	No	0.001 No samples out of 5 exceed the action level	Mg/L	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
<i>Nitrate Test Results Yr. 2009</i>	No	Less than 0.1	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<i>Sodium Test Results Yr. 2009</i>	No	17.0	ppm		50	
<b>Secondary</b>						

<b>Contaminants:</b>						
<i>Sulfate Test Results Yr. 2009</i>	<i>No</i>	<i>8.0</i>	<i>Ppm</i>		<i>RMCL = 250 ppm</i>	
<i>Fluoride Test Results Yr. 2009</i>	<i>No</i>	<i>0.1</i>	<i>ppm</i>	<i>4.0</i>	<i>4.0</i>	<i>Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories</i>
<i>Sodium Test Results Yr. 2009</i>	<i>No</i>	<i>17.0</i>	<i>ppm</i>		<i>RUL=50</i>	
<b>Disinfection By-Products:</b>						
<i>TTHM (Total Trihalomethanes) Test Results Yr. 2009</i>	<i>No</i>	<i>25</i>	<i>ppb</i>	<i>N/A</i>	<i>80</i>	<i>By product of drinking water chlorination</i>
<i>HAA5 (Haloacetic Acids) Test Results Yr. 2009</i>	<i>No</i>	<i>19</i>	<i>ppb</i>	<i>N/A</i>	<i>60</i>	<i>By product of drinking water chlorination..</i>
<b>Volatile Organic Chemicals:</b>						
<i>Toluene Year 2009</i>	<i>No</i>	<i>&lt; 0.31</i>	<i>ppb</i>		<i>1000</i>	<i>Discharge from petroleum factories.</i>
<i>Ethylbenzene Year 2009</i>	<i>No</i>	<i>&lt; 0.34</i>	<i>ppb</i>		<i>700</i>	<i>Discharge from petroleum factories</i>
<i>Total Xylenes Year 2009</i>	<i>No</i>	<i>&lt; 0.50</i>	<i>ppb</i>		<i>1000</i>	<i>Discharge from petroleum factories Discharge from chemical factories</i>
<b>Regulated Disinfectants</b>		<b>Level Detected</b>			<b>MRDL</b>	<b>MRDLG</b>
Chlorine		Range = 0.20 to 1.60 ppm Average = 1.14 ppm			4.0 ppm	4.0 ppm

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 (RUL) may be of concern to individuals on a sodium restricted diet.

As you can see by the table, our system had no violations. We are pleased that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is safe at these levels.

We at Long Beach Township 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. Please call our office if you have questions.

### Long Beach Township - Holgate System- PWSID # 1517002

Long Beach Township - Holgate System is a public community water system consisting of 1 well(s), 0 wells under the influence of surface water, 0 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): Kirkwood-Cohansey watertable aquifer system

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

### Susceptibility Ratings for Long Beach Township - Holgate System 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			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 2			2			2			2			2			2			2			2			
GUDI - 0																								
Surface water intakes - 0																								

- Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal
- 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
- 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 following paragraph is required by the EPA to satisfy regulatory revision 72 FR 57781.**

If present, elevated levels of lead can cause serious 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. Long Beach Township 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 drinking 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 [www.epa.gov](http://www.epa.gov)

In review of our records by The State of New Jersey Division of Water Supply found that our Holgate facility PWSID# 1517002 was out of compliance with the regulations promulgated pursuant to the New Jersey Safe Drinking Water Act. It is our requirement to notify the public of all noncompliance.

-Failure to submit sampling report for disinfection byproducts of Trihalomethanes & Haloacetic acids in the distribution system for the period 01-01-2004 to 12-31-2004.

-Failure to collect disinfection byproduct sample of Haloacetic Acids in the required monitoring quarter. The State of New Jersey monitoring schedule requires Haloacetic Acid samples to be performed during the 3<sup>rd</sup> quarter of the year 2005, the sample was performed during the 4<sup>th</sup> quarter of the year 2005. During the 4<sup>th</sup> quarter the MCL was 31 ppm. The maximum contaminant level allowed by law in drinking water is 60 ppm.

At no time was the public at risk or without safe drinking water. Both noncompliant notices were Tier 3 the lowest on the scale Tier 1 being the highest.