

Annual Drinking Water Quality Report

Borough of Chatham Water Utility

For the Year 2008, Results from the Year 2007

We are pleased to present to you this year's Annual Drinking Water Quality Report. The purposes of this report are to enhance consumer understanding of our community's drinking water supply and improve awareness of the need to protect our precious water resources. Our constant goal is to provide you with a safe and dependable supply of drinking water.

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 persons, 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).

The Borough of Chatham Water Department routinely samples and tests for over 80 possible contaminants in our water supply according to Federal and State laws. This table shows the results of our monitoring from January 1st to December 31st, 2007 and lists only detected contaminants.

Table of Detections						
Contaminant:	Violation?	Level Detected	Units of Measurement	MC LG	MCL	Likely Sources
Inorganic:						
Selenium Tested Yr. 2007	No	2	Ppb	50	50	Erosion of natural deposits; discharge from petroleum and metal refineries
Barium Tested Yr. 2007	No	0.01	Ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Tested Yr. 2007	No	< 0.1 No samples exceeded the action level.	Ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride Tested Yr. 2007	No	0.1	Ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Tested Yr. 2007	Yes	< 1 No samples exceeded the action level.	Ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) Tested Yr 2007	No	1.85	Ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Microbiological:						
Total coliform Bacteria	No	2 positive samples in October 2006		0	1	Naturally present in the environment
Radioactive:						
Gross Alpha Tested Yr. 2006	No	Range = 1.8 – 3.6 Highest detect = 3.6	pCi/l	0	15	Erosion of natural deposits
Beta/photon emitters (mrem/yr) Tested Yr. 2004	No	1.54	mrem/yr	0	4	Decay / erosion of natural deposits
Disinfection Byproducts:						
TTHM Total Trihalomethanes Tested Yr. 2007	No	1	Ppb	N/A	8	By-product of drinking water disinfection
Regulated Disinfectants	Level Detected		MRDL		MRDLG	
Chlorine	Average = 0.2		4.0 ppm		4.0 ppm	

We had two positive Total coliform Bacteria samples in October 2007, of which you were notified. We immediately re-sampled and all samples tested negative. We believe that the positive sample results were caused by either a sampling technique or laboratory error.

Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Coliforms were found in more samples than allowed, which was a warning of potential problems.

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 Borough of Chatham Water Utility is responsible for providing high quality drinking water, but can not 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 second to 2 minutes before using water for drinking and 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>.

Our water source: Our three wells are over 150 feet deep and draw groundwater from the Buried Valley Aquifer system of the Central Passaic River Basin. Our wells are located at the Public Works Complex, near the Middle School. Source water assessments are performed to determine the susceptibility of water sources to contamination. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water assessment Report and Summary for this public water system. 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 or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. Chatham Borough's source water susceptibility ratings and a list of potential contaminant sources is attached. The Passaic Valley Ground Water Protection Committee has developed a source water/wellhead protection planning document and an educational groundwater protection video, which are available at the Library of the Chathams. They provide more information such as potential sources of contamination and means to protect our water resources.

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 municipal 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, municipal 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, municipal 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.

Definitions:

In the following table you will find many terms and abbreviations with which you might not be familiar. 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 in detectable amounts.

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.

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

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Action Level - the concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

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 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.

Recommended Upper Limit (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RULs are recommendations, not mandates.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Goal (MRDLG) - The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination

The Chatham Borough Water Department a number of phone calls regarding the hardness levels in our drinking water. We would like to let the public know that the level of hardness is 195 mg/l, or 195 parts per million.

Waivers: 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 asbestos and synthetic organic chemicals.

We at the Borough of Chatham Water Utility work hard to provide high quality water to every tap. We know its importance to the community. In 1999, the Chatham Borough and Township Environmental Commissions distributed surveys to determine the environmental issues of most concern to residents. Eighty percent of the surveys returned by Borough residents indicated drinking water quality to be very important, making it the highest-ranking environmental issue in the survey. We at the Borough of Chatham Water Utility work hard to provide top quality water to every tap. We ask all residents to help us protect our water resources, which are critical for our community and our children's future.

In light of the events of September 11, 2001, Chatham Borough has reviewed our water system operations to increase security and decrease any vulnerabilities.

The following suggestions can help residents protect their drinking water quality:

- **Dispose of household hazardous waste properly. Call the Morris County Municipal Utilities Authority at 973-829-8006 for more information.**
- **Adopt environmentally friendly lawn-care practices, such as keeping grass cut high and choosing disease- resistant grasses to reduce the need for lawn chemicals.**
- **Keep streets free of litter and pet waste that can contaminate storm water runoff.**
- **Conserve water as much as possible and teach children the importance of protecting the water supply.**

For additional information: If you have any questions about this report or concerning your water utility, please contact Tony Torello at 973-635-5242. We want our valued customers to be informed about their water supply and distribution system.

If you want to learn more about water, health or environmental issues, you can contact the Borough Administrator, Bob Falzarano, or attend any regularly scheduled Borough Council, Board of Health or Environmental Commission meeting at Borough Hall, 54 Fairmount Avenue. Council meetings are held on the second and fourth Mondays of each month at 8:00 p.m., and minutes of the meetings are published on the Chatham Borough Website.