



Freeze Precautions:

***Eliminate drafts: keep basement and garage doors and windows tightly closed, close off crawl space vents and doors, and seal cracks in basement walls or crawl spaces.

***Insulate pipes in any unheated part of the home (exterior walls, crawl spaces, basements, cabinets) or spaces where air cannot circulate. Check for damp insulation; water-soaked insulation can cause freeze-ups.

***Protect water meter: Be sure the meter box cover is not broken, missing, or out of place. Report broken or missing covers to the Water & Sewer Services.

***Protect outside faucets. Drain outside faucets and sprinkler systems if a separate shut-off is available. Disconnect and drain garden hoses. Check with a plumber about frost-proof faucets. Caulk any space between the faucet and an outside wall.

***Open cabinet doors below sinks. If a sink is located against an outside wall, open cabinet doors to allow warm air to reach water pipes.

***Drain pipes before extended vacations.

A Cool Drink of Water.



2009 Annual Water Quality Report Borough of Clayton PWS ID #0801001

Borough of Clayton
PWS ID #0801001
856-881-3778

What's the Quality of My Water?

The Borough of Clayton has been providing clean water to your community since the 1800's, helping to keep you and your family healthy. We take this mission very seriously. Our constant goal is to provide you with a safe and dependable supply of drinking water. This report covers January 1 through December 31, 2009. The Borough of Clayton's drinking water supply surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this every year.

In 2009 our water department distributed 204,255,400 gallons of water to our customers. Our water source is groundwater pumped by four wells from three natural underground aquifers: the Potomac Raritan Magothy Aquifer from approximately 800 feet deep, the Wenonah-Mt. Laurel Aquifer from approximately 400 feet deep, and the Cohansey Aquifer from approximately 85 feet deep.

Clayton treats your water using filtration and chlorine disinfection to remove or reduce harmful contaminants that may come from the source water.

The New Jersey Department of Environmental Protection has completed and issued the Source Water Assessment Report and Summary for the Borough of Clayton Water System. The Source Water Assessment was performed on our four existing wells (#3, 4, 5 & 6) that deliver water to our water system. A susceptibility rating was used for the Borough of Clayton wells. These ratings ranged from low, medium or high for a particular category. The information on the Source Water Protection Program can be obtained by logging onto NJDEP's source water web site at www.state.nj.us/dep/swap/ or by contacting NJDEP Bureau of Safe Drinking Water at 609-292-5550.

The portion of our system which rated high, does not mean that a customer is consuming contaminated drinking water. The Borough of Clayton Water System is required to monitor for all these regulated compounds. Our current water system utilizes state of the art treatment removal processes.

If you have any questions about this report or concerning your water utility, please contact Richard Middleton, Director of Public Works, by calling (856)-881-3778 or by writing to this address: 125 N. Delsea Drive; Clayton, NJ 08312. We want our valued customers to be informed about their water utility. You can attend Regular Mayor and Council meetings on the second and fourth Thursday of each month at 8:00 p.m., in the Municipal Building, at 125 N. Delsea Drive.

The Borough of Clayton is committed to providing our customers with the highest quality of water and service. We believe in education and strongly urge our employees to attend various classes and seminars on water treatment processes and distribution operations. All licensed water operational personnel are mandated to continue training under the Safe Drinking Water Act Regulations.

Hydrant flushing is normally done in April and October. We do this to check the hydrants to make sure they are working properly. It is also done for taste and odor control of our system.

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 Clayton 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>.

The U.S. Environmental Protection Agency (EPA) wants you to know:

In order to ensure that tap water is safe to drink, EPA prescribes regulations that 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 that 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 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 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 by-products 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.

POSTAL PATRON
CLAYTON, NJ 08312

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PERMIT #18
CLAYTON, NJ
08312

2009 Monitoring Results for Borough of Clayton

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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

We have learned through our monitoring and testing that some contaminants have been detected. As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all primary Federal and State testing requirements.

Contaminant	Unit	MCLG Health Goal	MCL EPA's Limits	Highest Level Detected	Range Detected	Violation (Yes / No)	Year ¹ Sampled	Potential Source of Contamination
Microbiological Contaminants								
Total Coliform Bacteria	Positive / negative	0	2 or more positive samples / month	1 positive sample in April	NA	NO	2009	Naturally present in the environment.
Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.								
Radioactive Contaminants								
Combined Radium 226 & 228	pCi/L	0	5	2.12 +/- 0.83	1.00 +/- 0.83 to 2.12 +/- 0.83	NO	2009	Erosion of natural deposits.
Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.								
Gross Alpha	pCi/L	0	15	2.16 +/- 1.27	1.3 +/- 1.27 to 2.16 +/- 1.27	NO	2009	Erosion of natural deposits.
Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.								
Inorganic Contaminants								
Arsenic	ppb	0	5	3.8	ND - 3.8	NO	2006	Erosion of natural deposits. Runoff from orchards. Runoff from glass and electronics production wastes.
Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.								
Barium	ppm	2	2	0.0358	0.0221 - 0.0358	NO	2009	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.								
Copper	ppm	1.3	1.3 = AL	0.4 90th percentile	0.027 - 0.418	NO	2007	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.
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. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.								
Fluoride	ppm	4	4	1.76	0.454 - 1.76	NO	2009	Erosion of natural deposits. Water additive to promote strong teeth. Discharge from fertilizer and aluminum factories.
Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness in the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.								
Lead	ppb	0	15 = AL	3.3 90th percentile	ND - 6.7	NO	2007	Corrosion of household plumbing systems. Erosion of natural deposits.
Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.								
Nitrate	ppm	10	10	3.41	ND - 3.41	NO	2009	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Nitrate in drinking water at levels above 10 ppm 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.								
Volatile Organic Contaminants								
Chlorine	ppm	MRDLG = 4	MRDL = 4	0.08 RAA	0.03 - 0.34	NO	2009	Water additive used to control microbes.
Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.								
Haloacetic Acids (HAA5)	ppb	NA	60	1 (Running Annual Average)	ND - 1.10	NO	2009	By product of drinking water chlorination.
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.								
Total Trihalomethanes (TTHM)	ppb	0	80	3 (Running Annual Average)	ND - 8.37	NO	2009	By product of drinking water chlorination.
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidney or central nervous system, and may have an increased risk of getting cancer.								

Secondary and Non-regulated Substances				
Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.				
Substance	Unit	Recommended Upper Limits	Average Level and Range Detected	Year ¹ Sampled
Bromodichloromethane	ppb	0.19	0.683 ND - 2.05	2009
Chloride	ppm	250	96.6 ND - 168	2009
Hardness (Calcium)	ppm	250	24.5 22 - 27	2009
Iron	ppm	0.3	0.051 0.04 - 0.11	2009
Manganese	ppm	0.05	0.005 ND - 0.0152	2009
pH	su	6.5 - 8.5	7.68 6.5 - 8.31	2009
Sodium ²	ppm	50	123.25 36.1 - 240.0	2009
Sulfate	ppm	50	5.374 (average) ND - 14.3 (range)	2009
Total Dissolved Solids	ppm	500	335.33 160.0 - 666.0	2009
Dibromochloromethane	ppb	0.16	1.66 0.36 - 4.16	2009

Special Considerations 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), and 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 cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

Notes:

The Borough of Clayton does not add fluoride to the water. However natural fluoride was detected at 1.76 ppm. Parents of young children may want to consult with their dentist about their need for fluoride treatments.

¹The 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 accurate, are more than one year old.

²For healthy individuals, the sodium intake for water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the secondary recommended upper limit may be of concern to individuals on a sodium restricted diet. The sodium found in Clayton's water is from natural erosion. For more information on sodium, contact Gloucester County Health Department at 856-262-4100.

Definitions:

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 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 contaminants.

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.

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

90th Percentile: 90% of samples are equal to or less than the number in the chart.

NTU (Nephelometric Turbidity Units): A measure of clarity.

NA: Not applicable.

ND: Not detectable at testing limits.

SU: Standard Unit.

PPB (parts per billion): micrograms per liter (ug/l).

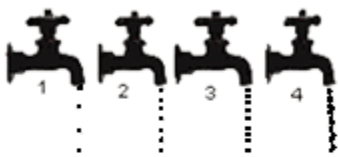
PPM (parts per million): milligrams per liter (mg/l).

pCi/L (picocuries per liter): a measure of radioactivity.

CDC: Centers for Disease Control.

EPA: Environmental Protection Agency.

RAA: Running Annual Average.



Gallons per month	
1. a slow steady drip (100 drops a minute)	350
2. a fast drip	600
3. a small stream	2,000—2,700
4. a large stream	4,600