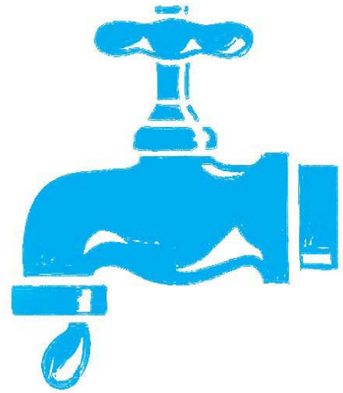
Attleboro Water Department

Facility Address:
1296 West Street
Attleboro, MA 02703



Tel. 774-203-1850

Water Department
1296 West Street
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2013 Water Quality Report

Dear Resident,

We are pleased to provide you with this annual report on your drinking water.

The City's water system (PWS 4016000) includes two water treatment facilities, three water storage tanks, 1900 fire hydrants, and 220 miles of water main. To insure reliability, the City's distribution system is interconnected with Seekonk, North Attleboro, and Norton. In the unlikely event of an emergency, the City could open an interconnection to maintain system operation.

The two treatment facilities are supplied with water from Manchester Reservoir (4016000-03S), Orr's Pond (4016000-04S), Luther Pond, Hoppin Hill Reservoir, Lake Mirimichi, and Blakes Pond (Wading River 4016000-05S). The watersheds for these surface supplies extend into 5 surrounding communities. Protection of these sources is a priority of the Water Department. The Massachusetts Department of Environmental Protection prepared a Source Water Assessment and Protection (SWAP) report in 2003. A copy of this report is available at the Water Department. This report surveyed the land use in the watershed and identified sources of potential contamination. Our watersheds contain a mix of land use. 28% of the Manchester/Orr's Pond watershed is protected open space and 38% of the Wading River watershed is protected. High risk items identified are the transportation corridors, transmission lines, and a capped solids waste facility. The City has a written Emergency Response Plan which would immediately be implemented in the event of a contamination event.

The Attleboro Water Department is part of the City of Attleboro government. Our legislative branch is the Attleboro City Council, which holds hearings on budget and financial matters and considers ordinances which create or amend local laws. Some of these matters affect the operation of the Attleboro Water Department. The City Council meets every other Tuesday at 7 PM in the City Hall, 77 Park Street, first floor council chambers. The meetings are televised live on Channel 98, the local government access cable channel.

If you have any questions or concerns about your water, please contact the Water Department, Christine Millhouse, Superintendent.

Water Conservation Tips

- When washing your hands, turn the water off while you lather.
- Run only full loads in your washing machine or dishwasher.
- Plant species native to the region will require little to no extra water than they get from the rain.
- Don't mow your lawn shorter than about 2 inches, as shorter grass requires more watering to stay moist.
- Encourage children in your household to find new and creative ways to save water.

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). In order to ensure that tap water is safe to drink, the Massachusetts DEP and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection.

Recent Changes and On-Going Projects

The residential water meter replacement program is nearly 60% complete. The Water Department will upgrade 5/8" residential meters at no charge to the user. The new water meters provide more efficient and accurate billing. Residents will be notified when replacement is scheduled.

The computer control system at the Russell F. Tennant Water Treatment Facility is being upgraded. This upgrade will ensure that the treatment facility continues to provide high quality, aesthetically pleasing drinking water in the quantities required by the City's residents and businesses. Construction began on this project during the Fall of 2013 and will be completed by Spring 2014.

Water Quality Summary

Listed below are the contaminants detected in Attleboro's drinking water in 2013. Not listed are over 100 other contaminants for which we tested but did not detect.

INORGANIC CHEMICALS

Substance (Contaminant)	Highest Level Detected	Range of Detection	Highest Level Allowed (EPA's	Ideal Goals (EPA's	Sources of Contaminant
Fluoride (ppm)	1.5	0-1.5	4		Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Perchlorate (ppb)	0.45	0.32-0.45	2.0	NA	Rocket propellants, fireworks, munitions, flares, blasting agents
Nitrate (ppm)	0.61	0.13-0.61	10	10	Fertilizer runoff, leaching from septic tanks and erosion of natural deposits.
Barium (ppm)	0.019	0-0.019	2	2	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.
Sodium (ppm)	75.0	22.6-75.0	NR	20 (SMCL)	Naturally present in the environment, runoff from road salt

Information about sodium in your drinking water: Possible sources: Natural sources; run off from road salt; by-product of treatment process. Health effects: Sodium sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the levels of sodium in their drinking water where exposures are being carefully controlled.
The Department of Environmental Protection Office of Research and Standards (ORS) guideline for sodium is 20 mg/L.

Unregulated or Secondary Contaminant	Date Collected	Result or Range Detected	Average Detected	SMCL (ppb)	Health Advisory	Possible Sources
Manganese (ppb)	1/11/2013	17-484	155	50	300	Erosion of natural deposits

Manganese is a naturally occurring mineral found in rocks, soil and groundwater, and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet, but can have undesirable effects on certain sensitive populations at elevated concentrations. The United States Environmental Protection Agency (EPA) and MassDEP have set an aesthetics-based Secondary Maximum Contaminant Level (SMCL) for manganese of 50 ug/L (micrograms per liter), or 50 parts per billion, and health advisory levels. In addition, EPA and MassDEP have also established public health advisory levels. ***Drinking water may naturally have manganese and, when concentrations are greater than 50 µg/L, the water may be discolored and taste bad. Over a lifetime, EPA recommends that people drink water with manganese levels less than 300 µg/L and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ug/L, primarily due to concerns about possible neurological effects. Children up to 1 year of age should not be given water with manganese concentrations over 300 ug/L, nor should formula for infants be made with that water for longer than 10 days.*** See: http://www.epa.gov/safewater/ccl/pdfs/reg_determine1/support_cc1_magnese_dwreport.pdf.

MICROBIOLOGY/TURBIDITY

Total Coliform	0	Present/Absent	Less than 5%	0	Naturally present in the environment.

Turbidity Compliance	MCL	Lowest Monthly % of Samples below 0.30 NTU	Highest Level Detected	Violation?
Wading River Daily	1.0 NTU	NA	0.36 NTU	No
Wading River Monthly	At least 95% below 0.3 NTU	99%	NA	No
West Street Daily	1.0NTU	NA	0.31 NTU	No
West Street Monthly	At least 95% below 0.3 NTU	100%	NA	No

Turbidity is a measurement of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of a filtration system. A possible source of turbidity is soil runoff.

DISINFECTANT RESIDUAL

Chlorine (ppm) Wading River Station	1.78	0.50-1.78	4 ppm	Water additive to control microbes
Chlorine (ppm) R.F.T. Water Treatment Plant	1.42	0.51-1.42	4 ppm	Water additive to control microbes
Bromate (ppm)	0	0	0.010 ppm	By-product of drinking water disinfection

Definitions:
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 Contamination Level (MCL) - The highest level of a contaminant level that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
ppm – One part per million; the equivalent of 1¢ in $10,000.
ppb – One part per billion; the equivalent of 1¢ in $10,000,000.
NR – Not regulated
AL – Action Level
ND – Substance not detected in the sample.
pCi/L – Picocuries per liter is a measure of the radioactivity in water.
mrem/yr – Millirems per year is a measure of the radiation adsorbed by the water.
NTU – Nephelometric Turbidity Units: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration process. TT – Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water NE – Not Established
Coliform: Coliform are bacteria that are naturally present the environment and are used to indicate that other potentially– harmful, bacteria may be present.
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 (ex. Chlorine, chloramines, chlorine dioxide).
Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known of expected risk of health.
MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Secondary Maximum Contaminant Level (SMCL): These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

ORGANIC CHEMICALS

Total (ppb) Trihalomethanes	45.1	15.0-54.0	80 (RAA)	0	By-Product of drinking water chlorination
Haloacetic Acids (ppb)	17.2	1.1-30.1	60 (RAA)	0	By-product of drinking water chlorination

Radionuclide Report

Substance	Result	MCL	Date Analyzed	Source of Substance
Gross Alpha Activity	1.9 (+- 2.5) pCi/L	15 pCi/L	1/17/2012	Natural Deposits

Lead and Copper– Results from July 2012

Lead and Copper	Date Collected	90th Percentile	Action Level (AL)	MCLG	# of Sites Sampled	# of Sites Above AL	Exceeds AL?	Source of Substance
Lead (ppb)[2]	7/17/12-7/24/12	4	15	0	31	1	No	Corrosion of household plumbing
Copper (ppm)	7/17/12-7/24/12	0.14	1.3	1.3	31	0	No	Corrosion of household plumbing

[1]Action Level – the concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

[2]"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. Attleboro Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been setting 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."

Substances Found in water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, reservoirs, streams and wells. As water travels over the land's surface or through the ground, it dissolves naturally occurring minerals and radioactive material, and can be polluted by animals or human activity. Contaminants that might be expected in source water include: microbial contaminants, such as viruses and bacteria; inorganic contaminants, such as metals and salts; pesticides and herbicides; organic chemicals from industrial or petroleum use; and radioactive materials. To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.

Vulnerability

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 healthcare 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).

What is a Cross Connection and What Can I do About it?

A cross connection is a connection between a drinking water pipe and a contaminated source. The pollution can come from your own home. For instance, you're going to spray fertilizer on your lawn. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops (say because of fire hydrant use in the City) when the hose is connected to the fertilizer, the fertilizer may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow prevention device can prevent this problem. Also, since 1994, there has been a check valve installed at the water meter at each service connection for new construction to help prevent against this type of situation.
The Attleboro Water Department recommends the installation of backflow prevention devices, such as low cost hose bib vacuum breakers, for all inside and outside hose connections. You can purchase these at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in the City. For additional information on cross connections and on the status of the City's cross connection program, please contact the Water Department.