

## HEALTH NOTES

In order to ensure that **tap water is safe to drink**, the Department of Environmental Protection (MA DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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 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 (800-426-4791).

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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. Housatonic Water Works 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>.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over 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 contact their doctor.

**Cross connections** are potentially hazardous situations for public or private potable water supply and a source of potable water contamination. A cross connection is any potential or actual physical connection between a potable water supply and any source through which it is possible to introduce any substance other than potable water into the water supply. Common Cross connection scenarios are a garden hose whose spout is submerged in a bucket of soapy water or connected to a spray bottle of weed killer.

Cross Connections between a potable water line and a non-potable water system or equipment have long been a concern of the Department of Environmental Protection (MA DEP). MA DEP established regulations to protect the public health of water consumers from contaminants due to back-flow events. The installation of back-flow prevention devices, such as a low cost hose bib vacuum breaker, for all inside and outside hose connections is recommended. You can purchase this 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 your community. For additional information on cross connections and on the status of your water system's cross connection program, please contact us.

### Residents can help protect our water resources by:

- Practicing good septic system maintenance
- Supporting water supply protection initiatives and conservation measures
- Taking hazardous household chemicals to hazardous materials collection days
- Limiting pesticide and fertilizer use, etc.

*"Water is essential for all dimensions of life."*

World Bank Institute  
WATER POLICY REFORM PROGRAM - Nov. 1999



### Contact Us

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## HOUSATONIC WATER WORKS

80 MAPLE AVENUE, SUITE 1 | GREAT BARRINGTON, MA 01230  
MA DEP PUBLIC WATER SUPPLY ID# 1113003



### 2016 Consumer Confidence Report Your Annual Drinking Water Quality Information

This report provides a snapshot of the drinking water quality that was achieved last year. Included are details about where your water comes from, what it contains, and how its quality compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies.

## PUBLIC WATER SYSTEM INFORMATION

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MA DEP). MA DEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator who oversees the routine operations of our system. A treatment process includes filtration and disinfection is also provided. Reservoir water is directed through slow sand filters and then a controlled amount of sodium hypochlorite is added and mixed in a contact time basin. This maze like structure mixes the chlorinated water and provides treatment over time that helps ensure complete disinfection of the drinking water. The water is monitored by us and MassDEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is required. As part of our ongoing commitment to you we make regular repairs to the system and address concerns of our customers and regulators. During 2016 we installed a supervisory control and data acquisition (SCADA) system to automatically measure disinfection in the system.

## YOUR DRINKING WATER SOURCE

### Where Does My Drinking Water Come From?

Housatonic Water Works water comes from surface water Long Pond Reservoir located southwest of the village of Housatonic. Long Pond has a surface area of 115 acres and storage capacity of 263 million gallons. The source is designated by MA DEP Source Name and ID Source Number as: Long Pond [1113003-01S]. The water system supplies approximately 821 service connections and serves a population of approximately 1300 people. Great Barrington Fire District's Water system can be used in emergencies.

### How are These Sources Protected?

MA DEP prepared a Source Water Assessment Program (SWAP) Report dated January 2003 to assist in the identification of potential sources of contamination. A susceptibility ranking of "moderate" was assigned to this system. Typical agricultural, commercial and residential land use around surface water sources can contribute to contamination. The SWAP report outlines land activity concerns and commends our water system on the vigilant inspection and monitoring of activities in the watershed along with regular communication with abutting property owners. The complete SWAP report is available at the Housatonic Water Works Office, or by contacting the Western Regional Office of MA DEP at (413)755-2215. You may also view this report online at: <http://www.mass.gov/eca/docs/dep/water/drinking/swap/wero/1113000.pdf>.

Prepared by *Housatonic Basin Sampling and Testing* on behalf of your water supplier. This report is a compilation of best available data sources including: licensed operators' reports; water supply owner's coordination; MA DEP public records; and EPA online records. The report represents an accurate account of your water quality to the best of our knowledge.

# Housatonic Water Works

## SUBSTANCES FOUND IN TAP WATER

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, and 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 by-products 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.

## COMPLIANCE WITH REGULATIONS

### Does Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. However lead levels were found to be above the applicable health standards. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water to reduce lead content. Additional information is available from the Safe Drinking Water Hotline, 1.800.426.4791. 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. We are adding buffers for controls to assist with the problem.

### Drinking Water Violations

In December 2015 we failed to report accurate disinfection contact time results and monitoring that caused the issuance of a treatment technique violation. We have corrected this situation and have installed an automated analyzer to assist in compliance requirements. Other than the violation listed above we have no other outstanding issues. For more information regarding our system you may also visit the EPA website at: <http://www.epa.gov/enviro/facts/sdwis/search.html>

### Opportunities for Public Participation

While we don't have regularly scheduled public meetings, we encourage dialogue on water quality issues. If you have any questions about the water you drink, please contact Jim Mercer at Housatonic Water Works' office. Our Water Quality Reports and e-droplets are also on the website: [www.housatonicwater.com](http://www.housatonicwater.com)

## IMPORTANT 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.

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

**90<sup>th</sup> Percentile** - Out of every 10 homes sampled, 9 were at or below this level.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Turbidity**—A measure of the cloudiness of water. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

**Massachusetts Office of Research and Standards Guidelines (ORSG)** —This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure.

## UNITS OF MEASURE

ppm = parts per million, or milligrams per liter (mg/l)  
 ppb = parts per billion, or micrograms per liter (ug/l)  
 ND = Not Detected  
 N/A = Not Applicable  
 NTU =Nephelometric Turbidity Unit  
 pCi/L =Unit measure of radioactivity

## WATER QUALITY TESTING RESULTS

The water quality tables show the most recent water quality testing results where levels were detected and compares those levels to standards set by the Environmental Protection Agency and Massachusetts Environmental Protection Agency.

MA DEP has reduced the monitoring requirements for *inorganic contaminant (IOC's)*, *perchlorate and synthetic organic contaminants (SOC's)* because the source is not at risk of contamination. Housatonic Water Works' latest samples collected for Perchlorate was in September 2012 and was found to meet all applicable US EPA and Mass DEP standards. With the exception of those compounds noted on the tables below, all other compounds in the testing panels reported

	Date Collected	90 <sup>TH</sup> %	Action Level	# of samples	# above action level	Possible Source of Contamination
Lead (ppb)	Q4 2016	19	15	<b>20</b>	<b>4</b>	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	Q4 2016	1.1	1.3	<b>20</b>	<b>0</b>	Corrosion of household plumbing systems; Erosion of natural deposits

Turbidity	Treatment Technique	Lowest Monthly % of Samples	Highest Detected Daily Value	Violation	Possible Source of Contamination
Daily Compliance (NTU)	5	—	0.08 11 Jan 2016	NO	Soil runoff
Monthly Compliance	95% min	0.029 Oct	—	NO	Soil runoff

\*Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. Monthly turbidity compliance is related to a specific treatment technique (TT). Our system filters the water so at least 95% of our samples each month must be below the turbidity limits specified in the regulations.

Radioactive Contaminants					
Gross Alpha (pCi/L)	16 July 2015	0.644	—	15	Sources include erosion of natural soil deposits
Radium 226 (pCi/L)	16 July 2015	0.299	—	5	
Radium 228 (pCi/L)	16 July 2015	0.245	—	5	

Inorganic Contaminants						
Regulated Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL or MCDL	MCLG OR MRDLG	Violation
Barium (ppm)	2011	0.0057	N/A	2.0	2.0	No
Flouride (ppm)	2011	0.08	N/A	4	4	No
Nitrate (ppm)	9 August 2016	0.13	N/A	10	10	No

\*Possible BARIUM Contamination sources include discharge of drilling wastes, metal refineries, erosion of natural deposits  
 \*Possible FLOURIDE Contamination sources include natural deposits, discharge from fertilizer and aluminum factories  
 \*Possible NITRATE Contamination sources include runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits

Secondary Contaminants						
Sodium (ppm)	9 August 2016	5.9	—	—	ORSG-20	No

\*Possible SODIUM Contamination sources include natural sources, runoff from use as salt on roadways.

Other Organic Contaminants and Unregulated VOC Contaminants					
Bromodichloromethane (ppb)	14 October 2014	3.6	N/A	By-Product of drinking water chlorination	
Chloroform (ppb)	14 October 2014	24	N/A	By-Product of drinking water chlorination	

Disinfectants and Disinfection By-Products						
Total Trihalomethanes (TTHM) (ppb)	9 August 2016	37	37-25	80	N/A	NO
Total Haloacetic Acids (HAA5)(ppb)	8 November 2016	40	14-40	60	N/A	NO
Chlorine Residual (ppm)	Q3 (average)	0.63 average	0.63-1.08	4	4	NO

\*Potential Contamination Source: chlorination by-product, industrial process