

2012 Annual Drinking Water Quality Report

For
HOUSATONIC WATER WORKS COMPANY
 HOUSATONIC, MA 01236
 MASSDEP PWSID # 1113003

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

I. PUBLIC WATER SYSTEM INFORMATION

Address: 80 Maple Avenue, STE 1, Great Barrington, MA 01230
 Contact Person: James J. Mercer
 Telephone: 413-528-1780
 Fax: 413-528-3024
 Internet Address: www.housatonicwater.com

Water System Improvements

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP). MassDEP 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. Our Sanitary Survey of 2011 recommends that we utilize this CCR to satisfy the residential education requirement of the cross connection compliance program, which is included in this report.

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 call Jim Mercer at the Housatonic Water Works office. The telephone number is 413-528-1780, the fax number is 413-528-3024, and the email address is housatonicwater@gmail.com. Our Water Quality Reports and e-droplets newsletters are also on the website: www.housatonicwater.com.

2. YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Your water is provided by the following sources listed below:

Source Name	MassDEP Source ID#	Source Type	Location of Source
Long Pond	1113003	Surface water	Off Division Street, Great Barrington

Is My Water Treated?

Our water system makes every effort to provide you with safe and pure drinking water. To improve the quality of the water delivered to you, we treat it to remove several contaminants. Reservoir water is filtered at our treatment plant. In filtration treatment, water is filtered through slow sand filters. The final stage of treatment involves adding chlorine and mixing the chlorine and water together in a contact-time basin. The basin is a maze-like structure that mixes the chlorinated water together for a long period of time to ensure complete disinfection.

The water quality of our system is constantly monitored by us and MassDEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is required.

How Are These Sources Protected?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply source(s) serving this water system. The SWAP Report assesses the susceptibility of public water supplies. Our complete SWAP report is available at our office located at 80 Maple Avenue, STE 1, Great Barrington, MA. For more information, call Jim Mercer at 413-528-1780. Our system was in the moderate risk bracket. Contaminants can range from buried fuel tanks, septic systems, etc.

Residential Cross-Connection:

To protect the public water system, any water customer that uses hazardous materials is required to install backflow protection devices at the service connection. A cross connection is any actual or potential physical connection between a water line and any pipe, vessel or machine containing a non potable liquid, such that it is possible for the non potable liquid to enter the water system by backflow. Backflow is the undesirable reversal of water flow. Backflow may be caused by a backpressure or backsiphonage condition. To prevent contamination of the public water system all cross connections must be identified, documented, placed under control and monitored on a yearly basis.

What Are the Key Issues For Our Water Supply?

The SWAP Report notes the key issues of residential land use and industrial use in the water supply protection area of Long Pond. The report commends our water system on the vigilant inspection and monitoring of activities in the watershed and communication with abutting property owners.

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated and Secondary Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Inorganic Contaminants						
Sodium (ppm)	2012	5.1	13.0	----	20	Natural sources; runoff from use as salt on roadways; by-product of treatment process
Sulfate (ppm)	2007	4.5	4.5	250	----	Natural sources
Other Organic Contaminants - When detected at treatment plant as VOC residuals, not TTHM compliance						
Bromodichloromethane (ppb)	2012	1.8	1.8	---	---	By-product of drinking water chlorination
Chloroform (ppb)	2012	10	26	---	---	By-product of drinking water chlorination

6. COMPLIANCE WITH DRINKING WATER REGS

Does My Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. We are proud to report that last year your drinking water met all applicable health standards regulated by the state and federal government.

Residents can help protect sources by contacting Housatonic Water Works Company if any activity is observed that could contaminate our drinking water supply.

3. 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.

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MassDEP) 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).

4. 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.

Maximum Residual Disinfectant Level (MRDL) – The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) 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 (chlorine, chloramines, chlorine dioxide) 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 contaminants.

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

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

90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.

- ppm = parts per million, or milligrams per liter (mg/l)
- ppb = parts per billion, or micrograms per liter (ug/l)
- pCi/L = picocuries per liter
- ND = Not Detected

5. WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table(s) is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table(s).

LEAD AND COPPER:

	Date	90th Percentile	Action Level	# of sites	Violations	
Lead (ppb)	2012	.012	.015	10	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2012	1.4	1.3	10	2	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

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 Company is responsible for providing high quality drinking water, but cannot control the variety 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>.

Turbidity	TT	Lowest Monthly % of Samples	Highest Detected Daily Value	Violation (Y/N)	Possible Source of Contamination
Daily Compliance (NTU)	5		.083 11/7/12	n	Soil runoff
Monthly Compliance*	At least 95%	.030 February	-----	n	
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.					

Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Inorganic Contaminants							
Barium (ppm)	2011	.0057		2	2	n	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm) ■	2011	.08		4	4	n	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	2012	.20		10	10	n	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Volatile Organic Contaminants							
Disinfectants and Disinfection By-Products							
Total Trihalomethanes (TTHMs) (ppb)	<i>Quarterly in 2012</i>	<i>31.78</i>	<i>24.1-35.2</i>	80	-----	n	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	<i>Quarterly in 2012</i>	<i>10.7</i>	<i>3.4-18.8</i>	60	-----	n	Byproduct of drinking water disinfection

■ Fluoride also has a secondary contaminant level (SMCL) of 2 ppm.