Quality On Tap!

Our Commitment Our Profession

2016 WATER QUALITY REPORT

SOUTH HADLEY FIRE DISTRICT NO. 2

WATER DEPARTMENT

PWSID# 1275001

WATER COMMISSIONERS

Frank DeToma, Chairman
Katharine Bedard, Clerk
Donna Russell, Member

For more information regarding this report contact: Mark Aiken, Water Superintendent, Phone: 413-532-9210

Office Hours are Monday through Friday, 8:30 A.M. till 2:30 P.M.

A Message about Your Drinking Water,

South Hadley Fire District No.2 Water Department places a strong emphasis on educating customers on the quality of our drinking water. The test results in this report confirm that your tap water not only meets federal and state standards for drinking water, but in most cases, it surpasses them. Just as important, we make the necessary investments to maintain and upgrade our facilities, this year we replaced 2500' of 6" water main on East Street with a new 8" water main, 3 new hydrants and 40 new house services so that we can deliver quality water directly to your tap 24 hours a day, seven days a week. Because we invest responsibly, we provide our water at less than a penny a gallon—an exceptional value for those we serve. Our customers are our top priority, and we are committed to providing you with the highest quality drinking water and service possible now and in the years to come.

Please take the time to review this report. It provides details about the source and quality of your drinking water using data from water quality testing conducted for your system between (January and December, 2016). Thanks for allowing us to serve you.

Landlords, businesses, schools, and other groups are encouraged to share this important water quality information with water users at their location who are not customers. Additional copies of this report are available at your Water Department and online at [www.shdistrict2.org.](http://www.shdistrict2.org)

This report is intended to provide you with important information about your drinking water and the efforts made by the water department to provide safe drinking water. The source of District No.2 drinking water is well water.

Where Your Water Comes From

In 2016, The South Hadley Fire District No.2 Water Department supplied our residents and businesses with 151,003,000 gallons of water pumped from our wells at the Dry Brook Station.
Back-up water supplies would come from South Hadley Fire District No.1 in case of an emergency. We have seven (7) interconnections between the two systems.

Public Participation How You Can Get Involved Customers can participate in decisions that may affect the quality of water by:

- Reading the information provided in bill inserts and special mailings
- Contacting the department directly with questions or to discuss issues
- Attending the Annual Meeting on the First Monday in May.
- Voting on the second Tuesday of June.
- Attending Monthly Water Commissioners Meetings.

Protecting Your Water Source

What is S.W.A.P.
SWAP (Source Water Assessment Program) is a program of the Massachusetts Department of Environmental Protection (DEP) to study existing and potential threats to the quality of public drinking water sources throughout the state. Sources are rated depending upon their contaminant susceptibility.
The Massachusetts Department of Environmental Protection (DEP) has completed a Source Water Assessment Program (SWAP) report for the South Hadley Fire District No. 2 Water Department. We use this report to assess and improve our water. Copies of this report are available upon request, or by logging on to:
www.mass.gov/dep/water/drinking/swapreps.htm.

Educational Information

"If present, elevated levels of lead can cause serious health problems, especially for pregnant woman and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The South Hadley Fire District No. 2 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 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:
www.epa.gov/safewater/lead."

Water Quality Statement

The data presented in the Table Detected Contaminants is the same data collected to comply with U.S. EPA and the Massachusetts state monitoring and testing requirements. We have learned through our testing that some contaminants have been detected well below the levels set by the EPA. To assure high quality water, individual water samples are taken each year for chemical, physical and microbiological tests. Tests are done on water taken from the source and, for lead and copper monitoring, from the customer's tap. Testing can pinpoint a potential problem so that preventative action may be taken.

South Hadley Fire District No. 2 Water Quality Report – Monitoring Results for Drinking 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, **(800)-426-4791**. The 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.

CONTAMINANT	UNIT	MCL EPA'S LIMITS	MCLG Health Goals	LEVEL Detected	VIOLATION (yes/no)	Year Sampled	Potential Source of Contamination
COPPER	ppm	**1.3 = AL**	1.3	**0.6** 90th percentile	NO	2014	Corrosion of household plumbing systems: erosion of natural deposits; Leaching from wood preservatives.
LEAD	ppb	**15 = AL**	0	**7.2** 90th percentile	NO	2014	Corrosion of household plumbing systems; Erosion of natural deposits.
NITRATE	mg/l	**10**	10	**0.85**	NO	2016	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
BARIUM	ppm	**2**	2	**0.03**	NO	2011	Erosion of Natural Deposits
Chromium	ppb	**100**	100	**3.89**	NO	2011	Erosion of Natural Deposits
Selenium	ppb	**50**	50	**1.07**	NO	2011	Erosion of Natural Deposits
Trihalomethanes	ppb	**80**	N/A	**2.14**	NO	2015	By-Product of Disinfection
Perchlorate	ppb	**2**	N/A	**0.03**	NO	2014	Rocket propellants, fireworks, munitions, flares, blasting agents
Sodium	ppm	**N/A**	N/A	**8.06**	NO	2015	Naturally Occurring
Sulfate	ppm	**N/A**	N/A	**23.6**	NO	2013	Naturally present in the environment.
Chlorine	ppm	**4**	4	**0.35**	NO	2015	Water additive used to control microbes

DEFINITIONS

1. 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.
2. 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.
3. Action Level (AL): the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow
4. 90th Percentile: 90% of samples are equal to or less than the number in the chart.
5. NA: Not Applicable.
6. PPB (parts per billion): micrograms per litter (ug/l).
7. PPM (parts per million): milligrams per liter (mg/L).
8. pCi/L (picocuries per liter): a measure of radioactivity
9. ND: Not Detectable

Important Health Information: Some people may be more vulnerable to contaminants in drinking water then the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/Aids or other immune system disorders, some elderly, and infants may be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (center for disease control) guidelines on appropriate means to lessen the risk of infection

by Cryptosporidium and other micro contaminants are available from **the Safe Drinking Water Hotline at (800) 426-4791.**

Health Information continued:
In order to insure that the tap water is safe to drink, The Mass DEP and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public works systems. The food and Drug Administration (FDA) and the Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.
The U.S. Environmental Protection Agency (EPA) wants you to know: 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 maybe 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, this can be naturally occurring or result from urban storm water 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 storm water runoff, and residential uses. **Organic chemical contaminants,** including synthetic and volatile organic chemicals, which are by-products of industrial 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. For more information about contaminants and potential health effects, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Unregulated Contaminant Monitoring Rule 3 (UCMR3)
During 2014, our Department participated in the Unregulated Contaminant Monitoring Rule. Unregulated Contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminant's in drinking water and whether regulation is warranted. Our results are available in this report.

UNREGULATED CONTAMINANTS

	AS SET BY EPA		*DIST. 2 WATER*					
	HIGHEST LEVEL	*IDEAL GOAL*	*HIGHEST LEVEL DETECTED*		*RANGE OF DETECTION*		*YEAR SAMPLED*	*MAJOR SOURCES*
PARAMETER	***ALLOWED (MCL)***	*(MCLG)*		*AVERAGE*	*MIN*	*MAX*		
Chromium (PPB)	***N/A***	*N/A*	*0.475*	*0.138*	*0.266*	*0.475*	*2014*	*Erosion of natural deposits*
Manganese (PPB)	***N/A***	*N/A*	*2.1*	*2.1*	*0*	*2.1*	*2014*	*Erosion of natural deposits*
Strontium (PPB)	***N/A***	*N/A*	*76.357*	*72.45*	*70.035*	*76.357*	*2014*	*Erosion of natural deposits*
Vanadium (PBB)	***N/A***	*N/A*	*0.465*	*0.37*	*0.308*	*0.465*	*2014*	*Erosion of natural deposits*
Chromium-6 (PPB)	***N/A***	*N/A*	*0.511*	*0.43*	*0.278*	*0.511*	*2014*	*Erosion of natural deposits*

In order to maintain water quality within your home, it is suggested by the South Hadley Fire District No. 2 Water Department that you remove and clean each faucet aerator twice annually. Aerators are the screens that screw into the end of the faucet. In addition, it is also recommended that you annually flush out the water heater and that you regularly maintain any in-home treatment equipment, such as water filters.

Our goal is to provide you with a continuous supply of quality drinking water. We welcome comments and suggestions you may have to help us reach and maintain that goal.

Do I Need to Take Special Precautions? To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. 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 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 at 1-800-426-4791.

What is a Cross-Connection and Backflow?

A cross-connection is any connection or potential connection between a potable (drinking) water supply system and any source of non-potable or non-drinkable liquid, solid or gas.
What appears to be a harmless garden hose connection creates a dangerous cross connection between potable and non-potable water.

There are two types of backflow: back-pressure and back-siphonage.

- Back-pressure is when the water supply is connected to a device that creates pressure, such as a boiler, pressure washer, etc. The pressure created can be greater than the water supply, thereby creating backflow.
- Back-siphonage is when there is a loss of pressure in the water supply. This will cause the water in your facility to flow backwards back into the water supply and/or into other plumbing connections within your facility. This situation can occur when a fire hydrant is opened, when there is a water main bread, etc.

Under certain circumstances of unequal pressure, a non-drinkable substance could either be pulled or pushed into a drinking water supply. This is called backflow.

Backflow can reverse the flow of water or other substances into the public or private water system, resulting in chemicals or contaminants getting into the drinking water. In other words, due to changes in pressure, the water can flow in the opposite direction from what is intended. This is why the installation, inspection and proper maintenance of Cross-Connection Control Devices is imperative to the safety of your drinking water.

Ways to conserve Water at Home:

1. Look for leaks and repair them right away.
   Most leaks are easy to detect and repair. For sinks, check faucets and pipes for dripping water. Replace washers, and repair or replace fixtures, if needed. For toilets, add food coloring to the tank water and check the bowl in 15 minutes. (Don't flush.) If there's color in the toilet bowl, it means there's a leak. Also recommended it that you look at your water meter and check to see if the low flow indicator is spinning while no one is using water. This is a good indicator of a leak.

2. Also check your water system for leaks.
   This is easy to do. Just follow these steps:
   - Locate your water meter and take an initial reading. Then make sure no one in your home uses any water for 30 minutes. When the time is up, take another reading.
   - Subtract the first reading from the second reading got tell how much water (if any) leaked out.
   - Then look for leaks. Find them by checking pipes, hoses and connections. Have any leaks repaired right away.

3. Wash dishes wisely.
   Use a dishwasher, if you have one.
   Scrape dishes, don't pre-rinse. Wash only full loads.
   Don't run the water continuously.
   Limit your use of the garbage disposal. Better yet – compost!

4. Minimize watering outdoors.
    - Water when the sun is down (to avoid evaporation) and when it's not windy. Water slowly, deeply and as little as possible.
    - Let grass grow taller in hot weather. Use mulch in the garden and around shrubs to save moisture.
    - Plant shrubs and other plants that don't need a lot of watering. Consider alternatives to big, thirsty lawns, such as native grasses.
    - Obey any watering restrictions in your community.

To learn more about saving water and incentives or other assistance available – contact these resources.

- The U.S. Environmental Protection Agency: www.epa.gov/WaterSense/
- The E.P.A. Safe Drinking Water Hotline: 1-800-426-4791
- Your local water utility: 413-532-9210.