# 2017 WATER QUALITY REPORT SOUTH HADLEY FIRE DISTRICT NO. 2 WATER DEPARTMENT PWSID# 1275001



**2017 Consumer Confidence Report (CCR)** 

We are pleased to report that during the past year, the water delivered to your home or business complied with or exceeded all state and federal drinking water requirements.

Once again we are proud to present our annual water quality report covering the period between January and December, 2017. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at any hour—to deliver the highest quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

In 2017 we pumped <u>156,971,000</u> gallons of water from our wells. Our water quality professionals are focused on providing the highest quality water possible, and our results reflect that commitment. Our active participation in water industry associations allows us to keep abreast of the latest developments in water quality issues.

The water quality that we deliver 24 hours a day, 365 days a year, is an exceptional value for our customers. Please be assured that South Hadley Fire District No. 2 is working daily to keep its facilities and your water safe from any outside dangers.

Beginning in 2016 year, South Hadley Fire District No.2 (SHFD2) no longer mails individual copies of the Consumer Confidence Report to customers, as it is available electronically by following the link on your water bill. Printed copies will be available in our office on or before July 1, 2018. If you have any questions, please contact the Water Department during regular business hours, Monday through Friday, from 8:30 AM until 2:30 PM

The South Hadley Fire District No.2 Water Commission is governed by three (3) Commissioners.

The Present Commissioners and the offices they hold are as follow:

Mr. Francis DeToma, Chair Ms. Katharine Bedard, Clerk Ms. Donna Russell, Member

Hours: Mon - Fri: 8:30am - 2:30pm

Telephone: (413) 532-9210

Mailing Address: 20 Woodbridge Street

South Hadley MA 01075

Superintendent, Mark Aiken www.shdistrict2.org

# SCADA upgrades

The supervisory control and data acquisition (SCADA) system transmission equipment is currently being upgraded. The new system allows for better control of the treatment and pumping equipment. We are currently in the process of updating control modules.

## 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.

## WATER QUALITY TEST RESULTS

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	0.471 90 <sup>th</sup> percentile	NO	2017	Corrosion of household plumbing systems: erosion of natural deposits; Leaching from wood preservatives.	
Lead	ppb	15 = AL	0	.0037 90 <sup>th</sup> percentile	NO	2017	Corrosion of household plumbing systems; Erosion of natural deposits.	
Nitrate Well - 1	ppm	10	10	0.99	NO	2017	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
Nitrate Well - 2	ppm	N/A	N/A	0.95	NO	2017	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
Sodium -Well 1	ppm	N/A	N/A	7.4	NO	2017	Naturally Occurring	
Sodium - Well 2	ppm	N/A	N/A	7.2	NO	2017	Naturally Occurring	
Sulfate – Well 1	ppm	N/A	N/A	13.5	NO	2017	Naturally present in the environment.	
Sulfate – Well 2	ppm	N/A	N/A	24.8	NO	2017	Naturally present in the environment.	
Chlorine	ppm	4	4	.35	NO	2017	Water additive used to control microbes	

#### **DEFINITIONS**

- 1. **MCL** (Maximum Contaminant Level): 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. **MCLG** (Maximum Contaminant Level Goal): 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. **AL** (Action Level): 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 ensure 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 LEV	EL DETECTED	RANGE OF I	DETECTION	YEAR SAMPLES	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 (PPG)	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.

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.

## **Protecting Your Water Source**

**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.

### **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.

#### **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."

**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

#### 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.

### The Challenges of winter in the Water Business

As winter marches on, we here in the northeast, along with most of the U.S. have been experiencing some of the coldest temperatures seen in quite some time. With extended periods of extreme cold come some of the problems that not just we have, but all water purveyors in the area have had to deal with. Sustained subfreezing temperatures cause the ground to contract which can wreak havoc on buried pipes. The pressures from a deeper than usual frost line result in a larger than typical amount of water main breaks. Examples of winter's might have been seen on the local news almost nightly with mains breaking all over the area and in some challenging locations with repair crews doing their best to keep up. Water District No.2 is no different. As the temperatures dropped, our crews have been diligently working, sometimes around the clock, to maintain water service to our customers throughout our distribution system with as little disruption as possible. All the while, dealing with some of the harshest conditions for working outdoors. From water main breaks and service leaks to frozen services and meters, our team has been handling it all to the best of their ability with great success. We are lucky to have such a dedicated group of hardworking, skilled individuals that come together as a team to keep the water flowing to our homes and businesses not just in the winter, but all year long.

#### Who's Pipes are Whose?

The South Hadley Fire District No. 2 Water Commission is responsible for pipes on the "street side" of the curb stop – specifically, from the water main in the street to the shut off at the curb. If you notice a water leak in the street or in the vicinity of your water meter, please call (413) 532-9210 to report it.

The property owner is generally responsible for all pipes and plumbing on the "customer side" of the curb stop. This includes the interior plumbing of the home, the outside irrigation system, the underground water service after the curb stop, the meter pit and the area where the property's water system connects to the water meter. South Hadley Fire District No.2 shall furnish and install the meter and keep it in a state of repair. In case of misuses, damage by frost, external causes or any other damage to the meter, the property owner shall be responsible for the cost of repair or replacement (per our fee schedule). Only the Water Department will furnish, set and replace any meter impaired by such causes.

#### Landlords/Tenants

The property owner MUST be listed on the water account. Delinquent water bills may result in a lien on your property. Upon request and with proper identification, bills will be sent to both the tenant and the property owner.

Please be aware that South Hadley Fire District No.2 will not involve itself in tenant/landlord disputes. The property owner is fully responsible for open and/or past due balances on his/her accounts. Failure to pay could result in termination of service and/or property lien.

#### **Troubleshooting Some Common Issues**

If your bill is unusually high, but has NOT been estimated, there are a few things you can do to investigate the situation. First, check for leaks. Small leaks can add up quickly. Just a 1/8-inch sized leak consumes more than 3,500 gallons per day. While most leaks are easy to find, others may be more difficult and can often be left undetected.

Start by checking your toilets. Toilets can lose hundreds of gallons of water when leaking. You can also put a few drops of food coloring in your toilet tank and wait a few minutes. If the color shows up in the bowl, you have a leak that needs to be repaired.

Check indoor and outdoor faucets and replace worn gaskets and washers.

Look for drip stains beneath and behind your dishwasher and washing machines.

Check leaks in your sprinkler system, including damaged sprinkler heads.

A high bill may also be explained by changes in your water usage. Consider the following:

Did you have company staying at your house? Have you recently filled your swimming pool?

How often are you watering your lawn?

Is your water sprinkler system functioning properly?

If you need assistance determining the reason for your unusually high bill, please contact the Water Department at (413) 532-9210.

#### **FAQs**

### 1. Is South Hadley Fire District No.2 Water Safe To Drink?

Yes. The water delivered to your home or business complies with or exceeds all state and Federal drinking water requirements.

#### 2. Where does our water come from?

South Hadley Fire District No.2 pumps groundwater from our wells at Dry Brook Station Aquifer. The quantity of water that we are able to pump in any given minute, day, month or year is strictly governed by the Massachusetts Department of Environmental Protection. 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.

### 3. How much water is stored in above ground storage tanks?

In total, (2) above ground water tanks. The total capacity of the above ground storage tanks is 1.7 million gallons of water. This type of water storage not only enhances water pressure (which is needed to take showers, sprinkle lawns and fight fires), but it also provides over a full days' worth of water supply to our entire area in case of an emergency situation.

### 4. What causes water discoloration, and is it harmful?

Water discoloration is usually caused from aging pipes. While not appealing, it is not harmful. Discoloration can result when the water lines are disturbed by installing a new pipe, improper hydrant flushing or shutting off the water to an area for maintenance. Your home's plumbing can also cause discoloration.

### 5. Do I need to filter my water?

Your tap water is perfectly safe without a filter. You might consider using a filter if you have internal problems with the plumbing in your home.

## 6. Is bottled water safer than tap water?

Keep in mind that many bottled waters are actually bottled tap water. Bottled water is regulated through the Food and Drug Administration and is considered a food product therefore, it is not as heavily regulated as tap water. Also, South Hadley Fire District No.2 is required to release information on their water quality, while bottled water companies are not.

## 7. How often is our drinking water tested for contaminants?

South Hadley Fire District No.2 takes hundreds of water samples throughout the year and makes them available to you in our annual Consumer Confidence Report (CCR). Our compliance with all state and federal drinking water laws remains exemplary.

### 8. Is it okay to drink hot water from my tap?

No. Do not drink hot water or use hot water from the tap for food or beverage preparation. Hot water systems contain metallic parts that can corrode over time and contaminate the hot water.

### 9. Isn't it wasteful to flush fire hydrants?

Conservation is very important, but hydrant flushing is a necessary element in the continuing program to improve the quality of water in our system. Water can get stale and develop an unpleasant taste, especially in areas where water usage is low. Flushing clears the distribution system of non-harmful sediment that may build up over time and enables us to provide you with fresh, clear water.

### 10. How many people does the Water Department serve?

Currently, the district 2 has over 1,500 connections serving nearly 6,000 people

### 11. Is there fluoride in my drinking water?

There is a small amount of naturally occurring fluoride (averaging .07 mg/L). We do not add any fluoride to the water.

## 12. Is the water that comes from the fire hydrant the same water used for drinking?

Yes. The fire hydrants and domestic services are tapped off of the same water mains.

### 13. How often is my meter read / will I be billed?

Your water meter will be read and billed on a bi-monthly basis a total of six (6) billings.

## 14. Do we have any water restrictions?

S.H.F.D. #2 encourages all customers to be water wise and practice conservation methods year-round. From May 1 through September 30, we suggest customers water lawns before 9:00 AM and after 7:00 PM.

## 15. I'm selling my house. How do I have the water bill taken out of my name?

If you are selling your home, please call our office and schedule a final reading. This reading should be taken as close to your settlement as possible.

