

2016 CONSUMER CONFIDENCE REPORT

Shady Harbor Fire District

Charlestown, RI
PWS ID#1559513

We are pleased to provide you with the Shady Harbor Fire District Consumer Confidence Report for 2016. This report provides you with information regarding water quality and water distribution services delivered to you in 2016. Included are details about where your water comes from, what it contains, and how it compares to standards set forth by state and federal regulatory agencies.

We want our customers to be informed about their water utility. If after reviewing this report you have any questions, or would like to know more about the Shady Harbor Fire District water system, please contact David Keil at (201) 937-3515, Ed Parsells (201) 394-3931 or Richard Newton at (401) 322-8957. You are also invited to attend the Shady Harbor Annual Meeting held on the fourth Saturday in July at 7pm. The Fire District will inform all Shady Harbor property owners of the location of this meeting several weeks in advance.

The Quality of Your Drinking Water

Our goal is to provide you with a safe and dependable supply of drinking water. We're proud to inform you that your drinking water meets all Federal and State requirements. We are committed to ensuring the quality of your water.

The Source of Your Drinking Water

Our water comes from two well fields. Each well field has a deep well approximately 250 feet deep. These wells (Well No. 6 and Well No.7) are eight inches in diameter and produce approximately eighteen gallons per minute. We also have two shallow six inch diameter wells that are thirty- four feet deep each. These wells also produce about eighteen gallons per minute. Both shallow wells were replaced recently. Well No. 3 was replaced in 2013; Well No. 4 in 2014. The water from the well network is pumped through calcite filters for help in the control of the pH before it enters the distribution system.

The RI Department of Health, in cooperation with other state and federal agencies, has assessed the threats to Shady Harbor Fire District's water supply sources. The assessment considered the intensity of development, the presence of businesses and facilities that use, store or generate potential contaminants, how easily contaminants may move through the soils in the Source Water Protection Area (SWPA), and the sampling history of the water.

Our monitoring program continues to assure that the water delivered to your home is safe to drink. However, the assessment found that the water source is at moderate risk of contamination. This means the water could one day become contaminated. Monitoring and protection efforts are necessary to assure continued water quality. The complete Source Water Assessment Report is available from the Shady Harbor Fire District or the Department of Health at (401) 222-6867.

Why Are There Contaminants in My Drinking Water?

Drinking water, including bottled water, may reasonably be expected to contain 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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:

- **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, or 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 the result of oil and gas production and mining activities.

Water Quality Test Results

The following table lists all of the drinking water contaminants that were detected through our water quality monitoring and testing. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from the January – December 2016 monitoring period. For those contaminants that are monitored less frequently the most recent test results are listed.

Maximum Contaminant Levels (MCL's) are set at very stringent levels. The Maximum Contaminant Level Goal (MCLG) is set at a level where no health effects would be expected, and the MCL is set as close to that as possible, considering available technology and cost of treatment. A person would have to drink 2 liters of water every day, as recommended by health professionals, at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

2016 TEST RESULTS									
Inorganic Contaminants	Violation Y/N	Level Detected (Range: single samples)				Unit Measurement	MCLG	MCL	Likely Source of Contamination
		Well #3	Well #4	Well #6	Well #7				
Barium (2015)	N	0.005	0.004	0.006	0.009	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (2015)	N	3.0	3.0	3.0	2.0	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (2015)	N	ND	ND	ND	0.79	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum
Nitrate (as Nitrogen) (2016)	N	1.29	1.04	1.12	0.23	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

ND = Not Detected

DISTRIBUTION SYSTEM TEST RESULTS

Inorganic Contaminants	Violation Y/N	Level Detected (Range)	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Copper* (1/1/13-12/31/15)	N	1.3 **	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead* (1/1/13-12/31/15)	N	4.3	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

*All sampling results represented at the 90th Percentile

**Of the 5 samples collected for Copper, we had only 1 AL exceedance. Our resulting 90th percentile for Copper still meets the acceptable AL of 1.3ppm.

Non-Detect (ND) - Laboratory analysis indicated that the contaminant was not present.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Action Level (AL) - The concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow. **Maximum Contaminant Level (MCL)** -The MCL is 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 MCLG is 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.

The State of Rhode Island requires testing for other contaminants not regulated by the US EPA. The following contaminant was detected in both our distribution system and well water

- **Sodium:** In 2016, sodium was detected in the distribution system results at 15.4ppm and in Well #3 at 13.1ppm, Well #4 at 11.3ppm, Well #6 at 13.0ppm, and Well #7 at 16.6ppm. The DWEL (Drinking Water Equivalent Level) for sodium is 28 ppm. Our water is below this level.

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, 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 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 (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking 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. The

Shady Harbor Fire District 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>.

We at the Shady Harbor Fire District work to provide top quality water to every tap. We encourage all of our customers to use water wisely and efficiently. We remind you to help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please do not hesitate to call us with any questions.