

2010 CONSUMER CONFIDENCE REPORT

Shady Harbor Fire District

Charlestown, RI

PWS ID#1559513

We are very pleased to provide you with this year's Consumer Confidence Report. This report provides you with information on the water and services that we delivered to you in 2010. Included are details about where your water comes from, what it contains, and how it compares to standards set by 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) 394-4209 or Richard Newton at (401) 322-8957. You are also invited to attend our annual meeting. It is held in July and the District will inform all Shady Harbor property owners of the time and location.

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 source is two drilled wells of 254 and 256-foot depth. These wells are eight inches in diameter and they each produce approximately eighteen gallons per minute. We also have two shallow wells six inches in diameter that are thirty-four feet deep, which produce about eighteen gallons per minute. The water is then pumped through calcite filters for help in the control of the pH.

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 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 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 2010 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.

2010 TEST RESULTS							
Microbial Contaminants	Violation Y/N	Level Detected		Unit Measurement	MCLG	MCL	Likely Source of Contamination
		Entry Point Well #3,4,& 6	Well #7				
Total Coliform Bacteria	N	1* (May Well #6)	ND	Highest Monthly # of Positive Samples	0	1 positive	Naturally present in the environment

*When this positive sample was taken, Well #6 was not connected to the system. In April 2010, under the supervision of Northeast Water Solutions (NWSI), we took Well #6 off line so the fire district could super-chlorinate it in an effort to kill iron bacteria that NWSI said was causing a taste/odor problem with the drinking water. As a standard operating procedure, post-chlorination samples were collected and one sample tested positive for total coliform. As a result, chlorination continued and subsequent sampling was conducted. The later samples were found not to have coliform and the DOH provided the go-ahead to place the well back into service.

Radioactive Contaminants	Violation Y/N	Level Detected		Unit Measurement	MCLG	MCL	Likely Source of Contamination
		Entry Point Well #3,4,& 6	Well #7				
Combined Radium	N	ND	1.29	pCi/L	0	5	Erosion of natural deposits
Inorganic Contaminants	Violation Y/N	Level Detected		Unit Measurement	MCLG	MCL	Likely Source of Contamination
		Entry Point Well #3,4,& 6	Well #7				
Barium (2009)	N	0.01	0.01	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (2009)	N	4	2	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (2009)	N	ND	0.42	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	0.15	0.28	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

DISTRIBUTION SYSTEM TEST RESULTS

Inorganic Contaminants	Violation Y/N	Level Detected 90 th Percentile	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Copper (2009)	N	0.25	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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.

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 conserve and use water efficiently and 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.