

**2010 CONSUMER CONFIDENCE REPORT**  
**Quonochontaug Central Beach Fire District (QCBFD)**  
Charlestown, RI  
PWS ID#1647512

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 valued members to be informed about their water system. If after reviewing this report you have any questions, or would like to know more about the QCBFD water system, please call George Prior at (401) 322-7708 or Bill Meyer (401) 322-1497. As always, we are committed to ensuring the quality of your water.

**The Quality of Your Drinking Water**

Our goal is to provide you with a safe and dependable supply of drinking water. However, in 2010 our Copper test results exceeded the EPA Action Level. Please see our *Test Results* table the *Action Level Exceedance* section at the end of this report for additional information. We are committed to ensuring the quality of your water.

**The Source of Your Drinking Water**

We have two wells located on the premises. Well #1 is our primary water source; Well #2 is strictly supplemental. We store our water in an 8,000-gallon water tank. We have installed a UV treatment system for disinfection.

The RI Department of Health, in cooperation with other state and federal agencies, has assessed the threats to QCBFD water supply sources. The assessment considered the intensity of development 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 that 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 Quonochontaug Central Beach 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 table below 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
		Well #1	Well #2				
Total Coliform Bacteria	N	ND	1 positive (March)	Highest monthly # of positive samples	0	1 positive	Naturally present in the environment
Inorganic Contaminants	Violation Y/N	Level Detected		Unit Measurement	MCLG	MCL	Likely Source of Contamination
		Well #1	Well #2				
Barium (2009)	N	0.02	0.03	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (2009)	N	3	4	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nitrate (as Nitrogen)	N	1.12	2.53	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 <sup>th</sup> Percentile	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Copper*	Y Action Level Exceedance	4.07	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	4	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

\*There were six (6) sites that exceeded the Copper Action Level.

**Not Detected (ND)** – Laboratory analysis indicated the contaminant was not detected

**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.

**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 QCBFD 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>.

**Action Level Exceedance:**

**Copper Action Level Exceedance:** The “90th percentile” is the value used to determine compliance with lead and copper action levels (AL). We took ten (10) copper samples in September; six (6) of those sites exceeded the copper AL resulting in a 90<sup>th</sup> percentile over the AL. We adjusted the pH of the water and resampled at four (4) sites; results were below the AL. We retested for lead and copper in June 2011 and continue to look into corrosion control treatment options to ensure the safety of your water. Copper works its way into the water by dissolving from copper pipes in the household plumbing. The longer the water has stood idle in the pipes, the more copper it is likely to have absorbed. Anytime the water has not been used for more than six hours-overnight, for example, or during the day when people have been gone to work or school, it should be cleared from the pipes before being used for drinking or cooking. This can be achieved by letting the cold water faucet run until you can feel the water getting colder-usually 30 to 60 seconds. This must be done before taking drinking water from any faucet in the house. In addition, hot water dissolves copper more quickly than cold water; as a result, water to be used for drinking or cooking should not be drawn from the hot water tap. If you need hot water for cooking or drinking, take water from the cold tap and heat it.

**Copper:** Copper is an essential nutrient, some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water contain copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.

We at QCBFD work to provide top quality water to every tap. We encourage all of our members to conserve and use water efficiently and remind you to help us protect our water sources, which are the heart of our community. Please do not hesitate to call with any questions.