

# *Annual Drinking Water Quality Report for 2004*

## **Block Island Water Company**

**New Shoreham, RI**

**PWS ID#1858430**

We are pleased to present to you this year's Annual Water Quality Report. This report informs you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water.

### **Treatment:**

The Water Company utilizes state-of-the-art Reverse Osmosis (RO) technology to treat all of the water that ends up at your tap. RO technology has proved to be one of the leaders in the manufacture and distribution of safe water in the world today. The RO system has allowed the water company to implement a level quality assurance and quality control that exceeds drinking water standards required on both the state and federal level.

### **Water Sources:**

We are capable of treating water from both surface and groundwater sources. Our sources are as follows:

- **Wells 5 and 6:** These wells are our primary sources of water. Each well is located within a crustaceous aquifer 200 feet below the surface.
- **Wells 1, 2 and 3:** RI Department of Health (RIDOH) approved wells, which can be used in the ROs if they are needed. Those wells are located within a shallower aquifer and are capable of producing approximately 70-80 GPM, respectively
- **Sands Pond:** Sands Pond is currently on stand-by as a back-up supply of water. Due to the high levels of organics within that source we are unable to treat that water within the ROs. If needed, we can treat the water within the old water production system on site.
- **Fresh Pond:** Fresh Pond is a RI DOH approved alternative source of water. The Block Island Water Company (BIWC) does not utilize this source unless all others fail in the event of an emergency. As with Sands Pond, the high levels of organics within Fresh Pond do not allow its treatment within RO technology. However, we can treat the water within the old water production system on site if needed.

The RI DOH, in cooperation with other state and federal agencies, has assessed the threats to Block Island'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 and wholesome. However, the assessment found that the water source is at LOW RISK of contamination. This does NOT mean that the water cannot become contaminated. Protection efforts are necessary to assure continued water quality. The complete Source Water Assessment Report is available from Block Island Water Company or the Department of Health at (401) 222-7769.

We are pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact the Superintendent of the Water Company at (401) 466-3210. Also, there are regularly scheduled meetings are on the first and second Tuesday of every month at the New Shoreham Water Pollution Control Facility located across from the Manisees Hotel.

Block Island Water Company routinely monitors for constituents in your drinking water according to Federal and State laws. This report shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2004. The contaminants fall into two categories: regulated, where enforceable standards or MCLs have been established, and unregulated, where only health advisory levels have been set. Some contaminants are tested for less frequently. The most recent results are reported along with the date the sample was taken. A table of "Testing Results" identifies those constituents that were detected in Block Island Water Company's water sources.

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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The sources of drinking water include rivers, lakes, ponds and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. Contaminants that may be 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, 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.

<b>TEST RESULTS</b>										
<i>Regulated Constituents (constituents with an MCL):</i>										
Radioactive Contaminants	Violation Y/N	Level Detected					Unit Measurement	MCLG	MCL	Likely Source of Contamination
		Well #1, 2, 3	Well #5	Well #6	Fresh Pond	Sands Pond				
Alpha Emitters	N	1.54 (2002)	ND (2002)	4.16 (2003)	ND (2001)	ND (2001)	pCi/L	0	15	Erosion of natural deposits
Beta/Photon Emitters *	N	ND (2002)	4.60 (2002)	7.61 (2003)	4.52 (2001)	4.28 (2001)	pCi/L	0	50*	Decay of natural and man-made deposits
Combined Radium	N	ND (2002)	0.53 (2002)	2.81 (2003)	2.22 (2001)	ND (2001)	pCi/L	0	5	Erosion of natural deposits
Inorganic Contaminants	Violation Y/N	Level Detected					Unit Measurement	MCLG	MCL	Likely Source of Contamination
		Well #1, 2, 3	Well #5	Well #6	Fresh Pond	Sands Pond				
Barium	N	0.04 (2003)	0.11 (2003)	ND (2003)	ND (2004)	ND (2004)	ppm	2	2	Erosion of natural deposits
Nitrate (as Nitrogen)	N	0.17	ND	ND	0.12	0.14	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

\*The EPA considers 50 pCi/L to be the level of concern for Beta/Photon Emitters

<b>DISTRIBUTION SYSTEM TESTING RESULTS</b>								
Inorganic Contaminants	Violation Y/N	Level Detected			Unit Measurement	MCLG	MCL	Likely Source of Contamination
Copper	N	0.15			ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	5			ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

**Non-Detects (ND)** - Laboratory analysis indicates that the constituent is 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 compounds not regulated by the US EPA. The following compound was detected in Block Island Water Company's water.

**Sodium:** Sodium was detected at a level of 32.8 mg/L in Wells #1,2,3, 23.4 mg/L in Well #5, 131 mg/L in Well #6 and 17.3 in Fresh Pond.

## **IMPORTANT INFORMATION**

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected.

As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Maximum Contaminant Levels (MCL's) are set at very stringent levels. The MCL Goal is set at a level where no health effects would be expected, and the MLC 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. For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We at Block Island Water Company work to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.