

307 Waterman Avenue  
Smithfield, RI 02917

*East Smithfield Water District*



# 2007 Water Quality Report

## The Quality of Your Drinking Water

The quality of your drinking water is excellent and your water is SAFE to drink. The East Smithfield Water District and all of its employees are committed to providing our customers with high quality drinking water that meets or exceeds all state and federal standards for quality and safety. To ensure delivery of a quality product, we have made significant investments in distribution piping, we maintain a close relationship with our primary water suppliers, the Providence Water Supply Board and the Town of Smithfield, and we test the water frequently to assure that it continues to meet all requirements.



This report informs you about the quality water and services that we delivered to you in 2006. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. After reviewing this report, if you would like to know more about the District's water system or if you have questions, please call the District office at (401) 231-0510. You are also invited to attend the Board's monthly meetings, which are held at the District's office on the first Wednesday of the month between September and June, starting at 7:00 PM. The District's office is located at 307 Waterman Avenue, Smithfield, Rhode Island. Office hours are 8:00 AM—4:00 PM during normal business days.

**We're proud to announce that your drinking water meets or exceeds federal and state standards for quality and safety!**

## The Source of Your Drinking Water

The Providence Water Supply Board is the primary supplier of water to the District. The water is delivered through a transmission and distribution system that includes two (2) pressure boosting pumping stations, and approximately 30 miles of piping which includes valves for control of water flow. The water connections into each building include a connection to a main pipe, a valve on the connection pipe and a water meter to measure water use. Water is also available for fire fighting through direct connection to 158 public fire hydrants.

### *Providence Water Supply Board*

All of the water from the Providence Water Supply Board comes from the Scituate Reservoir complex. This reservoir system is located in a basin area totaling 92.8 square miles of mostly rural, forested lands. Before delivery to the transmission and distribution system, all water from the reservoir system is treated at the Philip J. Holton Water Treatment Plant in accordance with state and federal requirements for drinking water.

### *Sourcewater Assessment*

The RI Department of Health, in cooperation with other state and federal agencies, has assessed the threats to Providence Water's 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. The assessment found that Providence Water's sources are 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 Providence Water or the Department of Health at (401) 222-6867.

### **Additional Providence Water Supply Facts:**

- ♦ *The main source of water, the Scituate Reservoir, contains over 37 billion gallons of water, at full capacity, and covers an area of 3390 acres.*
- ♦ *In addition to the Scituate Reservoir, there are also five other secondary reservoirs that combined add another 4 billion gallons of water.*

Providence Water Supply Board - Water Supply Division  
Phone: (401) 521-6300

---

## 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

## Understanding Our Water Quality Test Results

The table on page 3 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 2006 monitoring period. For those contaminants that are monitored less frequently, the most recent test results are listed.

**We're proud to announce that your drinking water meets or exceeds federal and state standards for quality and safety!**

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.

The State of Rhode Island requires testing for other contaminants not regulated by the US EPA. The following contaminant was detected in Providence's Water:

**Sodium:** Sodium was detected at a level of 13.8 mg/L.

## 2006 Test Results from The Providence Water Supply Board

Microbiological Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (TOC)	N	1.24 Range: 1.16—1.33	ppm	N/A	TT	Naturally present in the environment
Turbidity**	N	0.42 Range: ND—0.42	NTU	N/A	TT	Soil runoff

\*\*0.42 NTU was the highest single turbidity measurements recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100%.

Radioactive Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Beta/Photon Emitters * (2003)	N	10.9	pCi/L	0	50	Decay of natural and man-made deposits

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

Inorganic Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Fluoride	N	1.10	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	0.60	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Please note: In 2006, Providence Water conducted monitoring for Cryptosporidium and Giardia in both the source and effluent water. No evidence of the presence of either organism was detected during the sampling. Radon was not monitored.

## Distribution System Test Results from East Smithfield Water District

Inorganic Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Copper	N	0.06	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	6	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

## Units & Definitions

**Non-Detects (ND)** - Laboratory analysis indicates that the contaminant 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. A violation will occur only if the supplier fails to take corrective action

**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.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**Nephelometric Turbidity Unit (NTU)** - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU's is just noticeable to the average person. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth.

**East Smithfield  
Water District**

307 Waterman Avenue  
Smithfield, RI 02917

Phone: 401-231-0510  
Fax: 401-231-7053

FIRST CLASS  
U.S. Postage  
**PAID**  
Permit 56  
Waterville, ME

**2007 Water Quality Report**  
*Important Information:*  
**Your drinking water meets  
or exceeds federal and  
state standards for quality  
and safety**

## Recent System Improvements

During the past year, the District has improved the water system to better serve its customers by completing the following activities:

- Replaced 415 feet of aging six inch cement pipe with 8 inch ductile iron pipe
- Updated system hydraulic model
- Instituted semi-annual billing cycle for all residential customers
- Instituted accelerated residential meter replacement program
- Continued our ongoing training and certification of employees

## Please Remember to Conserve & Use Water Efficiently!

The East Smithfield Water District encourages water conservation and would be pleased to offer you assistance with:

- household water conservation tips and
- water saving plumbing retrofit devices

We recommend odd/even water use for outdoor watering. If your property address is an odd number outdoor watering should be used on odd numbered dates. If your address is an even number, outdoor water should be used on even dates. In accordance with Providence Water Supply Board requirements, the District may make odd/even water use outdoors mandatory in order to conserve the supply for everyone and to assure adequate water supply for fire protection.

