307 Waterman Avenue
Smithfield, RI 02917

*East Smithfield Water District*

# 2009 Water Quality Report

**Monitoring Year January—December 2008**

## 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, which also purchases its water from the Providence Water Supply Board. We test the water frequently to assure that it continues to meet all requirements.

**This report informs you about the quality of water and services that we delivered to you in 2008.** 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 6:30 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.

## 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 137 public fire hydrants.

*Providence Water Supply Board*

All of the water from the Providence Water Supply Board comes entirely from surface water reservoirs located in a 92.8 square mile, mostly rural, forested watershed basin in Scituate. The main source of this water supply is the Scituate Reservoir, which is the terminal reservoir in a network of six interconnected reservoirs. 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.

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

### 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, the 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. 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).

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 East Smithfield Water 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.

# 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 2008 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.

## 2008 Test Results from The Providence Water Supply Board

| | | | | | | |
|---|---|---|---|---|---|---|
| Total Organic Carbon (TOC) (removal ratio)* | N | 1.23 Range: 1.05—1.41 | ppm | N/A | TT | Naturally present in the environment |
| Turbidity** | N | 0.14 Range: 0.05—0.14 | NTU | N/A | TT | Soil runoff |

*In order to comply with the PEA standard, the removal ratio must be greater than 1.0. The detected level is the lowest removal ratio per quarter.
**Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. For 2008, 0.14 NTU was the highest single measurement recorded. The average turbidity measurement was <0.10 NTU. The lowest monthly percent of samples meeting the limit was 100%.

| | | | | | | |
|---|---|---|---|---|---|---|
| Barium | N | 0.01 | ppm | 2 | 2 | Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries |
| Fluoride | N | 1.20 Range: 0.90—1.20 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |

## 2008 Distribution System Test Results from The East Smithfield Water District

| | | | | | | |
|---|---|---|---|---|---|---|
| Copper (2006) | N | 0.06 | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead (2006) | N | 6 | ppb | 0 | AL=15 | Corrosion of household plumbing systems; erosion of natural deposits |

**Initial Distribution System Evaluation (IDSE) Data†**

| | | | |
|---|---|---|---|
| Haloacetic Acids (HAA) | Average: 18 Range: 7 – 23 | ppb | By-product of drinking water disinfection. |
| TTHM (Total Trihalomethanes) | Average: 49 Range: 22 – 52 | ppb | By-product of drinking water chlorination |

†Under the EPA Stage 2 Disinfectants and Disinfection Byproducts Rule (DBPR) our water system was required to conduct an Initial Distribution System Evaluation (IDSE). The IDSE is a one-time evaluation to determine the levels of disinfection by-products (TTHM & HAA) in the distribution system for future regulations. Disinfection byproducts are the result of the disinfection of your drinking water. They form when the disinfectants combine with naturally occurring organic matter in the water. The IDSE data was not used for compliance by the Rhode Island DOH-Office of Drinking Water Quality, and test results were not required to meet the MCL of 60 ppb for HAA and 80 ppb for TTHMs. The average listed is the highest Locational Running Annual Average (LRAA) from samples taken in the 1st, 2nd and 3rd Quarter of 2008.

# Units & Definitions

**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. 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.

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

**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

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**2009 Water Quality Report**
***Important Information:***
**Your drinking water meets or exceeds federal and state standards for quality and safety**

The Homestead Mills Condo Assoc
BARKAN MANAGEMENT COMPANY, INC.
Karen, Property Administrator X226
24 Farnsworth Street
Boston MA 02210-1264

# 2008—The Year in Review

In 2008, much progress was made in our on-going, long-range program to improve the District's infrastructure including:

- On Higgins Street, 1,750 feet of some of the oldest water pipe in the District was replaced.
- 600 feet of aging pipe on Whipple Road was abandoned, further reducing the amount of "old" distribution main in our system.
- A new meter pit, meter and pressure reducing valve were installed at our Ridge Road connection with the Smithfield Water Supply Board. We also increased the capacity of the connection, increasing fire protection in the entire service area.
- A pressure reducing valve was installed at the intersection of Waterman Avenue and Summerfield Drive, significantly increasing fire protection all along the Waterman Avenue service area.
- Ten (10) new fire hydrants were installed. We replaced five (5) old hydrants and added five (5) new hydrant locations, further increasing the fire protection in the District,.
- Nearly 200 radio-read meters were installed, beginning the transition to an all radio-read system.

We still have much work to do – but we're determined to remain focused on the continuous improvement of our system and the services we provide, while being mindful of the need to keep the cost of water affordable to our customers.

# 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

The Rhode Island Water Resources Board Drought Steering Committee reviews state and local current conditions (meteorological-agricultural and hydrological) and makes advisory recommendations on the current drought phase* based on presented information. Under normal or advisory conditions, the East Smithfield Water District recommends once weekly outdoor water use. In accordance with RI Water Resources Board requirements, the District may impose increasingly severe mandatory limits on water use if the drought condition is moved to a more serious phase by the Steering Committee. *Normal, Advisory, Watch, Warning, or Emergency