

2016 CONSUMER CONFIDENCE REPORT

Abbey Lane Water District

Foster, RI

PWS ID#1000009

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 2016. Included are details on where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

We want our valued 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 Abbey Lane Water District, please contact Linda Menard at 401-647-2729. We also have several meetings throughout the year. We send an announcement to all District customers in advance of each meeting date.

The Quality of Your Drinking Water

Our goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water.

The Source of Your Drinking Water

Our water source is four wells located on the premises, however only two wells, Well #2 and Well #3, are currently in use.

The RI Department of Health, in cooperation with other state and federal agencies, has assessed the threats to Abbey Lane Water 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. 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 Abbey Lane Water 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 2016 monitoring period. For those contaminants that are monitored less frequently, the most recent test results are listed on page 2.

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.

| 2016 TEST RESULTS | | | | | | | |
|---|---------------|------------------------|------------------------|------------------|------|-----|---|
| Radioactive Contaminants | Violation Y/N | Level Detected (Range) | | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| | | Well #2 | Well #3 | | | | |
| Gross Alpha, Incl. radon & uranium (2016) | N | 7.83 single sample | nd | pCi/L | 0 | 15 | Erosion of natural deposits |
| Combined Uranium (2014) | N | 4.26 single sample | nd | pCi/L | 0 | 30 | Erosion of natural deposits |
| Radon (2013) | N | 540 single sample | nd | pCi/L | n/a | n/a | Radon is a naturally occurring radioactive gas in the earth's crust |
| Inorganic Contaminants | Violation Y/N | Level Detected | | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| | | Well #2 | Well #3 | | | | |
| Barium (2016) | N | 0.039 (0.018-0.039) | 0.041 (0.019-0.041) | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Chromium (4/19/16) | N | 2.2 single sample | ND | ppb | 100 | 100 | Discharge from steel and pulp mills; erosion of natural deposits |
| Fluoride (4/19/16) | N | 0.42 single sample | 0.38 single sample | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (as Nitrogen) (4/19/16) | N | 0.37 single sample | 1.4 single sample | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nickel (4/19/16) | N | 0.13 single sample | ND | ppb | n/a | 100 | Corrosion of bronze particles |

ND = Not Detected

| DISTRIBUTION SYSTEM TEST RESULTS | | | | | | |
|----------------------------------|---------------|--------------------|------------------|------|--------|--|
| Inorganic Contaminants | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| Copper * (1/1/15-12/31/17) | N | 0.24 (0.11-0.5) | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead * (1/1/15-12/31/17) | N | 70.0 (0.0-91.0) | ppb | 0 | AL=15 | Corrosion of household plumbing systems, erosion of natural deposits |

*All sampling results represented at the 90th Percentile

** In our 2016 sampling for Lead, 4 of our 21 samples were found to be above the Action Level of 15.0 ppb. As a result and indicated in our table above, our 90th percentile was 70ppb, which is above the required Action Level.

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.

Drinking Water Equivalent Level (DWEL) - A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.

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.

The State of Rhode Island requires testing for other contaminants not regulated by the US EPA. The following contaminant was detected in our well water:

Alkalinity, Total: In 2016, total alkalinity was detected in Well #3 at 32ppm.

Calcium: In 2016, calcium was detected in Well #3 at 32.6 ppm.

Chloride: In 2016, chloride was detected in Well #3 at 140 ppm.

Iron: In 2016, iron was detected in our distribution system at 0.138 ppm.

Magnesium: In 2016, magnesium was detected in our distribution system at 2.03 ppm.

Sodium: In 2016, sodium was detected in Well #2 at 130 ppm & Well #3 at 12.0 ppm.

Sulfate: In 2016, sulfate was detected in Well #2 at 13 ppm & Well #3 at 12.0 ppm.

Zinc: In 2016, zinc was detected in Well #2 at 0.126 ppm & Well #3 at 0.026 ppm.

Sodium Notification

The reason for this notification is so that consumers on low or restricted sodium diets may take into account their sodium intake from the drinking water. If you have been placed on a sodium restricted diet, please inform your physician that your water contained approximately 130 ppm of sodium as a result of testing completed in 2016.

Lead & Copper AL Exceedance

In 2016, routine sampling detected Lead in excess of the maximum level allowed. 4 out of 21 sites sampled, exceeded the action level for Lead. Drinking water regulations require that samples are taken from homes with a high risk potential for Lead/Copper in the plumbing. Public education material was distributed to all residents, shortly thereafter. A corrosion control plan was submitted to the State Drinking Water Program. Lead sampling will resume in 2017. Results of subsequent future Lead testing will be made available to all residents. Lead Health Effects: Infants and children who drink water containing Lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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. Abbey Lane 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 Abbey Lane Water 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 our office with any questions.