

# 2013 Consumer Confidence Report Jaffrey Water Department *PWS EPA ID #1221010*

# www.townofjaffrey.com

#### Introduction

Like any responsible public water system, our mission is to deliver the best-quality drinking water and reliable service at the lowest, appropriate cost.)

Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future.

In the past year, the Department continued to implement recommendations from leak detection surveys of the entire water distribution system. Findings have allowed the town to locate potential system water leaks and make the appropriate repairs. During 2012, two (2) hydrant leaks and one (1) significant service leak were repaired. This program helps greatly in achieving water conservation goals.

The Department also began a Cross Connection and Backflow Testing Program with town staff and a contractor to complete mandatory semi-annual testing of all ninety-two backflow prevention devices in town.

Construction of the new Squantum Road Well was completed and the well was brought on line. This project provided for construction of a well house and groundwater treatment consisting of disinfection, pH adjustment and corrosion control. The project was funded in part by the New Hampshire DES DWSRF program with a 40% grant. Early last year, the Town was able to obtain project funding from the EDA to extend water on Peterborough Street from the area of DD Bean to Hadley Road and Old Sharon Road. Construction began last fall and is expected to be complete by this summer. EDA committed to 50% of the project cost with the balance from payments from the tax increment finance district.

These investments along with on-going operation and maintenance costs are supported by water users in Jaffrey and Rindge. When considering the high value we place on water, it is truly a bargain to have water service that protects public health, fights fires, supports businesses and the economy, and provides us with the high-quality of life we enjoy.

# What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs). 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 naturallyoccurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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 ur-

ban storm water 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 storm-water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, which can be naturallyoccurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

What is the source of my drinking water?

The Jaffrey water system consists of over 36 miles of piping with over 1,500 service connections in Jaffrey and a portion of Rindge. In 2012, an average of 323,125 gallons of water was pumped daily from the four wells (two at Turnpike, one at Contoocook and one at Squantum) and stored in two storage tanks (Bullet and Poole). Water pumped from the groundwater supply receives three treatment applications: chlorine is added as a precautionary disinfectant, though it is not vet required by the State for our system; sodium hydroxide is added to adjust the pH of the naturally acidic groundwater to minimize the corrosion of metals from piping; and polyphosphate additive is used to minimize the staining effects of naturally occurring manganese in the groundwater. Manganese is naturally found in our water and its effects are aesthetic only.

**Why are contaminants in my 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 po-



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tential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

**Do I need to take special precautions?** 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 microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

#### Source Water Assessment Summary:

DES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared on December 11, 2000 are noted below.

• **Turnpike Road Well**, four (4) susceptibility factors were rated high, two (2) were rated medium, and (6) were rated low.

• **Contoocook Lake Well**, three (3) susceptibility factors were rated high, three (3) were rated medium, and six (6) were rated low.

Note: This information is over twelve years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

The complete Assessment Report is available for review at the Jaffrey Department of Public Works. For more information, call the Department of Public Works at 603-532-6521 or visit the DES Drinking Water Source Assessment website at http://www.des.nh.gov/organization/divisions/ water/dwgb/dwspp/dwsap

#### How can I get involved?

For additional information regarding Jaffrey's water system, contact the Department of Public Works, Randall Heglin, Public Works Director at 603-532-6521. Although we do not schedule meetings on a regular basis, the schedule for any public hearing for specific projects may be obtained by calling the Jaffrey DPW at 603-532-6521. There are often updates on water projects presented to the Board of Selectmen at their regular meetings and also on the town's website at http://www.townofjaffrey.com

**Violations and other information:** There were no violations during 2012.

#### **Contaminants Detected:**

**Barium:** BDL to 0.020 ppm (MCL =2, MCLG =2 ppm)

Nitrate: 1.3 ppm (MCL =10, MCLG =10 ppm)

**MtBE:** BDL to 0.9 ppb (MCL =13, MCLG =13 ppb)

**Di(2-ethylhexyl)phthalate:** ND to 1.8 ppb (MCL =6, MCLG =0 ppb)

**Combined Radium 226 + 228:** 1.57 pCi/L (MCL = 5, MCLG = 0 pCi/L)

# Additional Testing:

Sodium: 3.38 to 46.6 ppm (no MCL/MCLG)

# **Definitions:**

**Maximum Contaminant Level** or **MCL**: 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** or **MCLG**: 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.

# Abbreviations:

**BDL:** Below Detection Limit **mg/L:** milligrams per Liter (equivalent to ppm)

ND: Not Detectable at testing limits
pCi/L: picoCurie per Liter
ppb: parts per billion
ppm: parts per million
ug/L: micrograms per Liter (equivalent to ppb)

# **Drinking Water Contaminants:**

**Barium:** Barium can be present as a result of discharge from drilling wastes, metal refineries or erosion of natural deposits. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

**Nitrate:** Nitrates can be present in runoff from fertilizer, leaching from septic tanks, sewage, or erosion of natural deposits. Nitrate in drinking water at levels above 10 ppb is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

**MtBE:** MtBE is present as a gasoline additive. The New Hampshire Bureau of Health Risk Assessment considers MtBE a possible human carcinogen. Some people who drink water containing MtBE in excess of the MCL over many years could experience problems with their kidneys and may have an increased risk of getting cancer.

**Di(2-ethylhexyl)phthalate:** This contaminant can result from discharge from rubber and chemical factories. Some people who drink water containing this well in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties and may have an increased rate of getting cancer.

**Radium (Combined 226 + 228):** Radium can be present due to the erosion of natural deposits. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.