



Town of Jaffrey, New Hampshire  
Department of Public Works  
23 Knight Street  
Jaffrey, NH 03452  
603-532-6521  
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June 1, 2010

Dear Town of Jaffrey Water Customer:

Enclosed is our annual Consumer Confidence Report summarizing the water quality results for the Town's drinking water system for the year **2009**. This report, required for all community water systems by the United States Environmental Protection Agency (USEPA) and the New Hampshire Department of Environmental Services (NHDES), is to provide consumers of publicly supplied water with a summary of the yearly testing results. To insure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. This report is developed and compiled by the Water Division of the Department of Public Works. The goal of this report is to provide our water customers a better understanding of their water system, provide test results and to allow customers to make more informed decisions regarding water use.

The following report includes results of those parameters that were detected in laboratory analysis. Results of all other tests were negative (nothing detected). Copies of full results may be obtained from the DPW upon request.

A water supplier's worst fear came true in August when, due to a positive bacteria test in the Jaffrey Center part of town, we were required to issue a boil order lasting two days. While the source for this positive bacteria sample remains unknown, we realize that this incident created a significant inconvenience to our customers. Because of the trust you require of us to supply safe drinking water, we implemented changes in the methods and location where we disinfect our water to insure that the water we provide to our customers meets all requirements.

This incident and the ice storm of 2008, demonstrated the need for the Town to effectively communicate with our residents in an emergency. Late last year the town contracted with CODE RED, an emergency communication system, which provides timely information in the event of an emergency to your home and/or cell phone. We encourage all customers to sign up for this service by visiting the Town website ([www.townofjaffrey.com](http://www.townofjaffrey.com)).

As always, our goal is to provide you, our valued customers, with quality water as cost-effectively as possible.

Sincerely yours,

Randall W. Heglin, Director  
Department of Public Works



## Jaffrey Water Department Water Quality Report – 2009 *PWS EPA 1221010*

### **What is the water quality of my drinking water?**

The Town of Jaffrey's water currently meets all State and Federal water quality regulations.

### **What is the source of my water?**

Jaffrey supplies potable water to its customers from three groundwater wells: one at Contoocook Well and two at Turnpike Well located in Jaffrey.

### **Why are contaminants in my water?**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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 Safe Drinking Water Hotline (1-800-426-4791).

### **How can I get involved?**

For additional information regarding Jaffrey's water system, contact 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.

### **About the Water Quality Report**

This report is required for all community water systems by the United States Environmental Protection Agency (USEPA) in conjunction with the New Hampshire Department of Environmental Services (NHDES) and is to provide consumers of publicly supplied water with a summary of the yearly testing results. To insure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. This report is developed and compiled by the Water Division of the Department of Public Works (DPW). The goal of this report is to provide our water customers a better understanding of their water system, provide test results and to allow customers to make more informed decisions regarding water use.

This report includes results of those parameters that were detected in laboratory analysis. Results of all other tests were negative (nothing detected). Copies of full results may be obtained from the DPW upon request.

If water is consumed at your location by different parties, such as rental buildings, community facilities, apartment buildings or industrial establishments, please make available this report and the attachments to those parties or post it in a highly visible location. Copies of this report may also be viewed at the town's website <http://www.townofjaffrey.com> and are available upon request.

### **Overview of Jaffrey's water system**

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 2009, an average of 402,057 gallons of water was pumped daily from the three wells 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 yet required by the State for our system; potassium 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 and iron in the groundwater. Manganese and iron is naturally found in our water and its effects are aesthetic only. In 2008, we completed the water meter replacement program enabling the Water Department to automatically read all meters more efficiently and more frequently (monthly) and identify customer leaks earlier.

## System Improvements

The Department continues to make water supply and distribution system improvements. In 2009, engineering design was completed, bids received and a construction contract awarded to Park Construction to upgrade the existing water transmission line from Bullet tank and existing water mains on Cathedral and Prescott Roads. This project was also approved for ARRA grant funding in the amount of 50%.

Engineering design including field survey and borings was begun for extending water to Old Sharon Road including portions of Hadley Road and Nutting Road (Stone Arch TIFD).

In 2009, a final permit application was completed and submitted to the New Hampshire Department of Environmental Services for a large groundwater withdrawal at the new Squantum Well site. A permit was issued earlier this year allowing groundwater withdrawal up to 250 gallons per minute. Engineering design has already begun for construction of a well house and treatment consisting of disinfection, pH adjustment and corrosion control and construction could begin as soon as later this year. It is likely that this project may qualify for NHDES Drinking Water SRF funding which could contribute up to 40% of the engineering design and construction costs.

As always, our goal is to provide you, our valued customers, with quality water as cost-effectively as possible.

## Do I need to take special precautions?

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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## TEST RESULTS – 2009

Contaminant	Violation Y/N	Level Detected/ Range of Detection	Unit Meas.	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Total Coliform Bacteria	Y	Present (3)	Present/ Absent	0	2 or greater per month	Naturally present in the environment
Fecal Coliform E. Coli	Y	Present (1)	Present/ Absent	0	0	Human and animal fecal waste
<b>Inorganic Contaminants</b>						
Barium	N	0.017	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate	N	1.32	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
<b>Synthetic Organic Contaminants</b>						
Di(2-ethylhexyl) phthalate	N	1.8	ppb	0	6	Rubber and chemical manufacturing
<b>Volatile Organic Contaminants</b>						
Total HAA's [Haloacetic Acids]	N	1.00	ppb	60	N/A	By-product of drinking water chlorination
MTBE [Methyl tertiary-butyl ether]	N	0.54 – 1.2	ppb	13	13	A gasoline additive
TTHMs [Trihalomethanes]	N	4.3 – 5.3	ppb	80	N/A	By-product of drinking water chlorination

**Definitions:** **MCLG:** Maximum Contaminant Level Goal, or 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. • **MCL:** Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. They are set as close to the MCLGs as feasible using the best available treatment technology.

**Abbreviations:** ppb: parts per billion • ppm: parts per million • n/a: not applicable

**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. 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming

**Organic 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 storm water runoff, and septic systems.

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



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## 2009 Water Quality Report

### **Health Effects Information: (No chemicals exceeded the MCL)**

#### **Microbiological Contaminants:**

**Total Coliform** - Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

**Fecal Coliform, E. Coli Bacteria** – Fecal coliforms and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.

#### **Inorganic Contaminants**

**Barium** – Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure

**Nitrates** – Naturally occurring through erosion of natural deposits. Nitrates in drinking water above 10 ppm is a health risk for infants less than 6 months of age. Nitrates may rise for short period of time because of rainfall or agricultural activity

#### **Synthetic Organic Contaminants**

**Di (2-ethylhexyl) phthalate** – Some people who drink water containing Di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have increased risk of getting cancer

#### **Volatile Organic Contaminants**

**MTBE** – The New Hampshire Bureau of Health Risk Assessment considers MTBE a possible human carcinogen.

**TTHMs** – Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have increased risk of getting cancer

**Total HAA's** – Some people who drink water containing haloacetic acids in excess of the MCL over many years may have increased risk of getting cancer

#### **Source Water Assessment Summary:**

The NH Department of Environmental Services has prepared a Source Water Assessment Report for the sources serving this community water system, assessing the sources' vulnerability to contamination. The results of the assessment, prepared on 4/20/2000, are as follows:

The Turnpike Well, received 4 high susceptibility ratings, 3 medium susceptibility ratings, and 5 low susceptibility ratings.

The Contoocook Well, received 0 high susceptibility ratings, 4 medium susceptibility ratings, and 8 low susceptibility ratings.

The complete Assessment Report is available for review at the Jaffrey Department of Public Works or Water Department. For more information call Public Works Director Randall Heglin at 532-6521 or visit NH Department of Environmental Services Drinking Water & Groundwater Bureau web site at [www.des.nh.gov/dwgb](http://www.des.nh.gov/dwgb).