



# 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 two groundwater wells (Contocook Well and 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 1500 service connections in Jaffrey and a portion of Rindge. In 2008, an average of 400,986 gallons of water was pumped daily from the two 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 in the groundwater. Manganese 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. We will be beginning replacement of meters that are older than 10 years.

## **System improvements**

The Department continues to make water supply and distribution system improvements. In 2008, we inspected and cleaned the interior and exterior of the Bullet and Poole storage tanks. The second or redundant well at Turnpike was approved for operation by DES and put into service and the main well at Turnpike was inspected, cleaned and the pump was rehabilitated and placed back into service. Following an extensive study and sampling program, DES approved an increase in the pumping rate at Contoocook Well to 300,000 gallons per day and we will continue to monitor historical low-level cyanide contamination in the area (that has shown no contamination to the supply well) and submit an annual report to DES. And finally, a Large Groundwater Withdrawal Permit has been submitted to DES for development of the Town's third municipal well site on Squantum Road.

As always, our goal is to provide you, our valued customers, with adequate 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 – 2008

Contaminant	Violation Y/N	Level Detected/ Range of Detection	Unit Meas.	MCLG	MCL	Likely Source of Contamination
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### Microbiological Contaminants

Total Coliform Bacteria	N	Present (1)	Present/Absent	0	2 or greater per month	Naturally present in the environment
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### Inorganic Contaminants

Copper	N	0.01 – 0.074	ppm	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits
Cyanide	N	Less than 20	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Lead	N	Less than 0.005	ppm	0	1.5	Corrosion of household plumbing systems; erosion of natural deposits

### Volatile Organic Contaminants

Total HAA's [Haloacetic Acids]	N	3.196 - 3.299	ppb	60	N/A	By-product of drinking water chlorination
MTBE [Methyl tertiary-butyl ether]	N	Less than 0.5 to 1.60	ppb	13	13	A gasoline additive
TTHMs [Trihalomethanes]	N	5.59 – 6.90	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

**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.

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

#### Microbiological Contaminants:

potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

#### Inorganic Contaminants:

**Copper** – Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**Cyanide** – Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid..

**Lead** – Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested additionally flush your tap for 30 seconds to 2 minutes before using tap water.

#### 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 systems, and may have an 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 an increased risk of getting cancer.



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