

# Frenchtown Water 2010 Annual Water Quality



## **KEEPING YOU INFORMED!**

The Frenchtown Charter Township provides your drinking water and is pleased to present you with the thirteenth annual water quality report. This report follows the guidelines set by the Michigan Department of Environmental Quality (MDEQ). Our goal is to provide you with a safe and dependable drinking water supply. This report illustrates that we are achieving our goals.

## **YOUR WATER FOOTPRINT**

H2O Conserve web site ([www.h2oconserve.com](http://www.h2oconserve.com)) has produced a fun way to find out how much water we are using on a daily basis. The Web site features the H2O Calculator and tips for saving water. The web site allows you to compute your water footprint, which includes home water use and water used to produce your food, energy, and household products. It is a quick and fun way to see the amount of water we are using daily.

## **GOING GREEN**

Everyone is trying to find ways to go green. Well there are a few ways you can help with just your water habits. A very easy habit to change is letting the water run while you brush your teeth. It may seem like a small change, but can save thousand of gallons of water. You can install water saving faucets and toilets. These devices use less water every time you use them. Be sure to fix any constant dripping faucets, it is not just annoying, it is also a huge loss of water. You can lose about 20 gallons of water per day from a single dripping faucet. If you have a yard sprinkler system, make sure your sprinkle heads are not watering your driveway or sidewalks. Every little change will help.

## **WATER QUALITY RESULTS**

Frenchtown Township routinely monitors your drinking water according to Federal and State laws. The table in this report shows the results of monitoring period for January 1<sup>st</sup> to December 31<sup>st</sup>, 2010 unless noted.

## **OUR DRINKING WATER**

Our drinking water originates from Lake Erie where it is treated to prevent obstructions from Zebra mussels. Raw Water is then pumped to the Water Treatment Plant. The MDEQ has preformed a Source Water Assessment of our water supply. Our source water has been categorized as highly susceptible, given land uses and potential contamination sources within the source water area. If you would like more information on the SWA report, please call the Water Utility Director: Rich Weirich

## HEALTH AND SAFETY INFORMATION

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily pose a health risk.

The sources of both tap and bottled drinking waters include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from animals and human activity. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's safe drinking water hotline (800) 426-4791.

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 salt and metals, which can be naturally occurring, or result from urban storm water 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, septic systems, and urban or agricultural runoff (i.e. pesticides and herbicides).

All of these contaminants were below the level of concern in your water. To ensure that tap water is safe, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration is in the process of establishing limits for contaminants in bottled water, which must provide the same protection for public health.

- *Radioactive Contaminants*, which can be naturally occurring or the result of oil and gas production and mining activities.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential use.

All of these contaminants were below the level of concern in your water. To ensure that tap water is safe, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration is in the process of establishing limits for contaminants in bottled water, which must provide the same protection for public health.

## DEFINITIONS

**Parts per million (ppm) and parts per billion (ppb)** – One ppm can be equated to 4 teaspoons of salt in a standard 24-foot backyard pool. One ppb is one teaspoon of salt in an Olympic sized pool.

**Maximum Residual Disinfections Level Goal (MRDLG)** – The level of drinking water disinfections below which there is no known or expected risk to health.

**Maximum Residual Disinfections Level (MRDL)** – The highest level of disinfection allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Contaminant Level Goal (MCLG)**- The MCLG is the level of contaminant in drinking water below, which there is no known or expected health risk. MCLGs provide for a margin of safety.

**Maximum Contaminant Level (MCL)**- The MCL is the highest level of a contaminant that is allowed in the drinking water. MCLs are set as close to the MCLGs as feasible, using the best available treatment technology. MCLs are set at very stringent levels by the State and Federal government. To understand the possible health effects, a person would have to drink about two liters of water every day at a MCL level for a lifetime to have a one-in –a-million chance of having the associated health effect.

**Nephelometric Turbidity Unit (NTU)** – measures clarity.

**Treatment Technique (TT)** – A required process intended to reduce the level of contaminant in drinking water.

**Action Level (AL)** – The concentration of a contaminant, which, if exceeded, triggers treatment or other required action a water system must follow.

**ND** – Not detectable at testing limit

# Frenchtown Water Department 2010 Water Quality Test Results

The following chart illustrates the levels at which regulated elements were detected during 2010, unless other wise noted. Please note that some chemicals, such as chlorine and fluoride, are added to the water to improve health. We are pleased to report that all the detected substances are within Federal and State limits.

## Monitored at the Water Treatment Plant

Regulated Elements and Source	Average	Low	High	Maximum Allowed in Drinking Water (MCL)	Maximum Level Goal (MCLG)
Fluoride Added to water to promote strong teeth Discharge of fertilizer and aluminum factories Erosion of natural deposits	0.54 ppm	Na	Na	4.0 ppm	4.0ppm
Chlorine Water additive used to control microbes	0.63 ppm	0.48	0.89	MRDL=4.0 ppm	MRDLG=4.0 ppm
Turbidity <sub>5</sub> Soil runoff	0.086 ntu	0.039	0..176	TT	none
Sodium Naturally occurring mineral	115	Na	Na	none	none
TOC	MCL MCLG Level FoundCCR	Range	Sample Date	Violation	Typical Source
	TT N/A 25% is Required	19-51%	Monthly	No	Naturally present in the environment

## Monitored in the Distribution System

**Lead and Copper – Monitored at the Customers' Taps** – We collected samples for lead and copper in 2008, since we met the regulations we are only required to test every three years.

Copper	Corrosion of customer plumbing	90%= 300 ppb	Exceeded 0	1300 ppb	1300 ppb
Lead <sub>2</sub>	Corrosion of customer plumbing	90%= 2 ppb	Exceeded 0	15 ppb	0 ppb

## Trihalomethanes and Halo Acetic Acid – Monitored in the Distribution System

	Average	Low	High	MCL	MCLG
Total Trihalomethanes –by product of Chlorinated water	48.0 ppb	12	74	80 ppb	0
Halo Acetic Acids – by product of Chlorinated water	39.0 ppb	14	60	60 ppb	0

### Footnotes:

- TOC – The Total Organic Carbon removal ration is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The ratios shown are the average of the ratios and the range of months covered by this report. Our required removal of TOC is 25%.
- 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. Frenchtown Water Department 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 at 1-800-426-4791 or at <http://water.epa.gov/drink/info/lead>.
- Turbidity measures the cloudiness of the water. For systems that provide filtration, like Frenchtown, turbidity must never exceed 1 NTU, and must not exceed 0.3 NTU in more than 95% of daily samples in any month. All of our samples were below 0.3. This indicates that our treatment process is working effectively.
- Averages shown for TTHM (Total Trihalomethanes) and HAA5 (Halo Acetic Acids) are the highest running annual averages calculated quarterly. Compliance is based on this average.

## **Frenchtown Water Department Information**

It's hard for me to believe I am already writing new articles for another year. During 2010 we closed two long dead end water mains to improve water quality. We are in full swing of changing out our Automatic Reading Devices on all the water meters. We are now entering year two of our four-year project to replace all the Ramar reading devices with the Orion reading system. Currently our old Ramar system readers are dying out sooner than anticipated. We are working very hard to try to get all non-working readers changed out as soon as possible. If you notice on your water bill that you have been estimated, feel free to read your water meter and call our billing office with your read.

If you should have any questions or concerns about your water quality or water related issues, we encourage you to call. We would like nothing more than to try to answer any questions you might have.

### **Liquid Assets Documentary**

If you interested in a very information Water infrastructure program, try to catch a PBS special called Liquid Assets. It is a very well done documentary on the state of aging water infrastructure in America. Penn State University put together the film and provides a short trailer at <http://www.liquidassets.psu.edu>. If you have few extra minutes, please take a look at the trailer.

### **Information for people with Special Health Concerns:**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 infection. 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 also available from the Safe Drinking Water Hotline (800) 426-4791.

### **IMPORTANT CONTACTS**

Frenchtown Water Plant: (734) 289-1015

Frenchtown Charter Township: (734) 242-5800

EPA Safe Drinking Water Hotline: 800-426-4791

EPA Website: [www.epa.gov/safewater](http://www.epa.gov/safewater)

Michigan DNRE Website: [www.michigan.gov/DNRE](http://www.michigan.gov/DNRE)

Frenchtown Charter Township Web Site: [www.frenchtowntownship.org](http://www.frenchtowntownship.org)

Frenchtown Water Plant business hours: 8am– 4pm

All Water Department emergencies can be reported 7 days a week, 24 hours a day @ **734-289-1015**. One of our water treatment operators will dispatch a distribution service worker to handle the problem.

