

2007 Annual Water Quality



Frenchtown Charter Township Water Treatment

5300 North Dixie Highway – Newport, Michigan 48166
734-289-1015





KEEPING YOU INFORMED!

The Frenchtown Charter Township provides your drinking water and is pleased to present you with the tenth 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.

WATER PLANT EXPANSION UPDATE

It has been about 2 years now since the completion of plant expansion, and we are happy to inform you that the new membrane plant is running very well. We have had a few minor hiccups with equipment along the way, but we are very excited with the quality of water the system produces. Along with the addition of the Ozone system we are producing very high quality of water. We will continue to not only meet, but also exceed all state and federal drinking water standards.

WATER QUALITY RESULTS

Frenchtown Township routinely monitors your drinking water according to Federal and State laws. The table on the back of this report show the results of monitoring period for January 1st to December 31st, 2007, unless otherwise noted. The test results show that your drinking water meets or surpasses all requirements.

OUR DRINKING WATER

Our drinking water originates from Lake Erie. Water is drawn through two intakes lines. The intakes are both equipped with zebra mussel control to prevent obstructions. 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 Plant Superintendent: Rich Weirich

FRENCHTOWN WATER DEPARTMENT

We are in the process of completing a GIS Mapping system. What is a GIS System and how will it help the water department do its job? GIS stands for Graphic Information System. This system when complete will show every valve, fire hydrants, water main and many of the curb stops on aerial maps of the Township. Each feature will be tied to a GPS (Global Positioning System) that will be capable of finding these features to the nearest three feet. This will help us find valves and curb stops that have been paved over, covered with landscape material or snow. In emergencies we will be able to isolate the broken feature quicker and affect fewer customers. This system also includes ties to information files like the as built drawings of every water main in the system, types and age of the fire hydrants and billing records of customers. This will give us the best available information at the touch of a laptop keyboard that will be in each service vehicle.

STONEY CREEK WATER TOWER PROJECT

We are going to be in the process of completing a project to repaint our S. Stoney Creek Water Tower. The water tower was constructed in 1993 and is in need of some fresh paint. We are very pleased with the life of the current paint system, most water towers only get about 10 year and we have seen around 15 years. We need to assure the water quality and the life of the steel water tower, so we plan to have the inside and outside completely repainted and any minor repairs done at that time. This will help to prolong the life of the tower and assure water quality.

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
Michigan DEQ Website: www.michigan.gov/deq
Frenchtown Water Plant business hours: 8am– 4pm
All Water Department emergencies can be reported 7 days a week, 24 hours a day @ **800-296-0154**.

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 Contaminates*, 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)
- *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.

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.

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 limits

Frenchtown Water Department 2007 Water Quality Test Results

The following chart illustrates the levels at which regulated elements were detected during 2007, 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	0.75 ppm	Na	Na	4.0 ppm	4.0ppm
TOC ₁ Naturally present in the environment	26% Removal (25% Required)	24-29%	TT		N/A
Chlorine Water additive used to control microbes	1.51 ppm	0.95	2.83	MRDL=4.0 ppm	MRDLG=4.0 ppm
Turbidity ₃ Soil runoff	0.057 ntu	0.036	0.131	TT	none
Sodium Naturally occurring mineral	15	Na	Na	none	none

Monitored in the Distribution System

Lead and Copper – Monitored at the Customers’ Taps – We collected samples for lead and copper in 2005, since we met the regulations we are only required to test every three years.

Copper	Corrosion of customer plumbing	90%= 200 ppb	nd	56	1300 ppb	1300 ppb
Lead ₂	Corrosion of customer plumbing	90%= 2 ppb	nd	6	15 ppb	0 ppb

Trihalomethanes and Halo Acetic Acid₄ – Monitored in the Distribution System

Total Trihalomethanes –by product of Chlorinated water	57.2 ppb	12	60	80 ppb	0
Halo Acetic Acids – by product of Chlorinated water	51.9 ppb	15	87	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 monthly ratios for the 12 months covered by this report. The TOC removal was measured each month and the system did meet all TOC removal requirements set by the state. Our required removal of TOC is 25%.
- Compliance is based on the 90th percentile, where 9 out of 10 samples must be below the Action Level. None of our lead and copper samples exceeded the Action Level. Special Information on 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 other in the community as a result of materials used in your home’s plumbing. If you are concerned about lead levels in your home’s water, you may wish to have your home’s water tested, and to flush your tap for 30 seconds to 2 minutes before using the water. Health effects of Lead: 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 their attention span and learning abilities. Adults who drink water with excess lead over many years could develop kidney problems or high blood pressure.
- 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.

