

Frenchtown Water 2017 Annual Water Quality



KEEPING YOU INFORMED!

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

HARMFUL ALGAE BLOOM

The last couple of summers we have all been hearing and dealing with Harmful Algae Blooms (HAB) in Lake Erie. HAB's are a growing problem that needs attention. I wanted to give a quick note on how we are combating the problem in your drinking water. Our water plant is equipped with an Ozone and Membrane systems that works to destroy or remove the algae and toxins from the water. We start sampling early in the season to assure we know exactly how much of a problem we are dealing with. We increase our sampling if anything is detected in our incoming water. We post all results on our web page to keep you informed.

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 1st to December 31st, 2017 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 performed 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 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.



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 2017 Water Quality Test Results



The following chart illustrates the levels at which regulated elements were detected during 2017, unless otherwise noted. Please note that some chemicals, such as chlorine and fluoride, are added to the water to improve public 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	Maximum Level Goal
					Drinking Water (MCL)	(MCLG)
Fluoride	Added to water to promote strong teeth Discharge of fertilizer and aluminum factories Erosion of natural deposits	0.44 ppm	0.08	1.12	4.0 ppm	4.0 ppm
Chlorine	Water additive used to control microbes	0.73 ppm	0.42	0.85	MRDL=4.0 ppm	MRDLG=4.0 ppm
² Turbidity	Soil runoff	0.045 ntu	0.030	0.262	TT	none
Sodium	Naturally occurring mineral	15	Na	Na	none	none
Bromate	Formed when Ozone is used to disinfect Water.	RAA 2.70	1.70	4.10	Sample Date Quarterly	Violation No
⁵ TOC	Naturally present in the environment	30.12%	25.52%	36.69%	25% Removal Required (TT)	N/A

Monitored in the Distribution System

⁴Lead and Copper – Monitored at the Customers' Taps – We collected samples for lead and copper in 2017, since we met the regulations we are only required to test every three years.

Copper(Cu) Corrosion of customer plumbing	90%= 0.2 ppm	Exceeded MCL- 0	1.3 ppm	1.3 ppm
¹ Lead (Pb) Corrosion of customer plumbing	90%= 1 ppb	Exceeded MCL- 0	15 ppb	0 ppb

³Trihalomethanes and Halo Acetic Acid – Monitored in the Distribution System

	Max LRAA	Low	High	MCL	MCLG
Total Trihalomethanes –by product of Chlorinated water	51.0 ppb	17	84	80 ppb	0
Halo Acetic Acids – by product of Chlorinated water	23.0 ppb	11	34	60 ppb	0

Footnotes:

- 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 locational running annual averages calculated quarterly. Compliance is based on this average.
- Lead and Copper list the number of homes that exceeded the AL instead of a range of detections.
- 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 quarterly ratios for the 12 months covered by this report. The TOC removal was measured each quarter and the system did meet all TOC removal requirements set by the state. Our required removal of TOC is 25%.

Frenchtown Water Department Information

Lead and Copper Update

We sampled for Lead and Copper in the summer of 2017. Our results are listed in the water quality page. If you have any questions about the results, feel free to call us.



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) 242-3282

EPA Safe Drinking Water Hotline: 800-426-4791

EPA Website: www.epa.gov/safewater

Michigan DEQ Website: www.michigan.gov/DEQ

Frenchtown Charter Township Web Site:

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.

