



Drinking Water Water Quality Report 2015

Where does our water come from? The City of Fremont draws water from an intake on the Sandusky River. The water is pumped into a 700 million gallon up-ground reservoir. The water then flows by gravity to the water treatment plant where it is treated to make it safe to drink. Another intake is located near Rodger Young Park and can provide a limited supply of water during certain emergencies. Our water source is considered surface water and requires extensive treatment before it can be used as drinking water. For the purpose of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens, which may rapidly arrive at the public drinking water intake with little warning or time to prepare. The City of Fremont's drinking water source protection area contains potential contaminant sources such as agriculture, home construction, and leaking underground and aboveground storage tanks, landfills, septic systems, wastewater treatment discharges, roadways, and railways.

What are sources of contamination to drinking water? The sources of drinking water both tap water and bottled water includes 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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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, urban storm water runoff, and septic systems; (E) radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some 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).

Who needs to take special precautions? Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

About your drinking water. The EPA requires regular sampling to ensure drinking water safety. The Fremont Water Treatment Plant conducted sampling for bacteria; inorganic; synthetic organic; and volatile organic contaminants during 2015. Samples were collected for a total of 51 different contaminants, most of which were not detected in the City of Fremont water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

How do I participate in decisions concerning my drinking water? Public participation and comment are encouraged at regular meetings of the Fremont City Council which meets at 7:30 pm on the first and third Thursdays of each month at the Fremont Municipal Building at 323 South Front Street.

Important Drinking Water Definitions:

- **Action Level (AL):** The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **The "<" symbol:** A symbol that means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Units Description:

- **Nephelometric Turbidity Units (NTU).** A nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Parts per Million (ppm) or Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- **Parts per Billion (ppb) or Micrograms per Liter (µg/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- **Not applicable (NA).**

For more information and/or additional copies of this report, visit the City of Fremont website at www.fremontohio.org and go the Water Treatment department. The 2015 Water Quality Report is located on the right side of the page.

Or contact: City of Fremont Water Treatment Plant
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**CITY OF FREMONT, OHIO
2015 DRINKING WATER CONSUMER CONFIDENCE REPORT**

In 2015 we had an unconditioned license to operate our water system. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The Ohio EPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminants (Units)	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Year Sampled	Likely Source of Contaminants
Bacteriological Contaminants							
Total Organic Carbon ¹	NA	TT	2.3	1.7 – 3.2	No	2015	Naturally present in the environment
Turbidity (NTU) ²	NA	TT	0.08	.05 – 0.15	No	2015	Soil Runoff
Turbidity (% samples meeting standard)	NA	TT	100	100 - 100	No	2015	Soil Runoff
Inorganic Contaminants							
Barium (ppm)	2	2	0.02	.020 - .020	No	2015	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Flouride (ppm)	4	4	1.53	0.68 - 1.53	No	2015	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm) ³	10	10	3.16	1.09 – 3.16	No	2015	Runoff from Fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Synthetic Organic Contaminants including pesticides and herbicides							
Atrazine (ppb)	3	3	0.59	0.29 – 0.59	No	2015	Runoff from herbicide used on row crops
Simazine (ppb)	4	4	0.12	0 - .12	No	2015	Herbicide runoff
Disinfectants and Disinfection By-Products							
Total Trihalomethanes (ppb) TTHM	No goal for the total	80	71.5	20.0 – 89.6	No	2015	By-product of drinking water chlorination
Haloacetic Acids (ppb) HAA5	No goal for the total	60	14.0	9.0 – 20.4	No	2015	By-product of drinking water chlorination
Chlorine (ppm)	MRDL 4	MRDL 4	2.3	1.0 – 2.3	No	2015	Water Additive used to control microbes
Bromodichloromethane (ppb)	NA	NA	14.0	NA	No	2015	By-product of drinking water chlorination
Chloroform (ppb)	NA	NA	23.0	NA	No	2015	By-product of drinking water chlorination
Dibromochloromethane (ppb)	NA	NA	8.7	NA	No	2015	By-product of drinking water chlorination
Bromoform (ppb)	NA	NA	1.4	NA	No	2015	By-Product of drinking water chlorination
Lead and Copper	90th percentile	# of samples over AL	MCLG	Action Level (AL)	Units	Violation	Likely Source of Contaminants
Copper (Collected June 2014)	0.047	0	1.3	1.350	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead ⁴ (Collected June 2014)	3.2	0	0	15.5	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹ The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between the percentages of TOC actually removed to the percentage of TOC required to be removed. Our water system is in compliance with TOC removal requirements if the value is greater than one (1). A value of less than one (1) indicates a violation of the TOC removal requirements.

²Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The

turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 5 NTU at any time. As reported above the Fremont Water Treatment Plant's highest recorded turbidity result for 2015 was 0.15 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

³Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

⁴If 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. The Fremont Water Treatment Plant 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 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

The Fremont Water Treatment Plant monitored for Cryptosporidium in the raw water during 2010. Cryptosporidium was detected in one of three samples collected from the source water. It was not detected in the finished water. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water indicates the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.