

## **City of Conneaut Water Department Drinking Water Consumer Confidence Report for 2017**

The City of Conneaut Water Department makes it a priority to supply residents with quality drinking water that is both safe and reliable. Water is tested using advanced equipment and sophisticated methods to ensure that it meets state and federal standards for appearance and safety. The City of Conneaut is pleased to report that the water provided by the City's Water Department meets or exceeds established water-quality standards. This report, which is required by the Safe Drinking Water Act, includes source water description, general health information, water quality testing results, and other helpful information.

### **Source Water Information**

The City of Conneaut Water System uses surface water drawn from one intake in Lake Erie. For the purposes of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature surface waters are accessible and can be easily contaminated by chemicals and pathogens. Also, compared to ground water, they tend to move swiftly, so an upstream spill may rapidly arrive at the public drinking water intake with little warning or time to prepare. Based on information compiled for this assessment, the Conneaut drinking water protection area is susceptible to contamination from municipal wastewater treatment discharges, industrial waste water discharges, air contamination deposition, runoff from residential and urban areas, contaminated river sediments, oil and gas production and transportation, and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping operations and recreational boating. The threat to water quality from activities in the Potential Influence Zone must be considered relatively low, because the drinking water intake is located at some distance from the shoreline. The threat posed by commercial shipping operations and recreational boating is likely more significant. It is important to note that this assessment is based on available data, and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. Although the source water (Lake Erie) for the Conneaut Public Water System was determined to be susceptible to contamination, historically, the treatment plant has effectively treated this source water to meet drinking water quality standards.

The City of Conneaut Public Water System treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More detailed information is provided in the City of Conneaut's water system drinking water source assessment report, which can be obtained by calling Richard Neubauer at 440-593-7437.

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:

- 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 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (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 (800-426-4791).

### **Health Information**

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 (800-426-4791).

The EPA requires regular sampling to ensure drinking water safety. The City of Conneaut Water Department conducted sampling for bacteria, inorganic, radiological, and volatile organic contaminants during 2017. Samples were collected for a wide-range of different contaminants, most of which, including algal toxins, were not detected in the City of Conneaut Water Supply. Some of our data, though accurate, are more than one year old.

### **Lead Information**

If present, elevated levels of lead can cause serious health problems. Infants and young children are typically more vulnerable to lead in drinking water than the general population. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Conneaut 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## Contaminants Table

The table below is a summary of the water quality characteristics for Conneaut for the year 2017. It shows the levels of detected contaminants and their allowable ranges. For example, turbidity is a measure of the cloudiness of the water and is an indication of the effectiveness of filtration system. The turbidity limit set by the EPA is 0.3 NTU or less 95% of the time each month. As shown in the table, Conneaut met this goal 100% of the time and the highest recorded turbidity result for 2017 was 0.29 NTU.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Microbiological Contaminants</b>							
Total Organic Carbon	N/A	TT	1.0	0.8 - 1.3	NO	2017	Naturally present in the environment
Turbidity (NTU)	N/A	TT	0.29	0.02 - 0.29	NO	2017	Soil Runoff
Turbidity (% meeting standard of 0.3 NTU)	N/A	TT	100%	100%	NO	2017	
<b>Inorganic Contaminants</b>							
Nitrate (ppm)	10	10	0.6	<0.10 - 0.6	NO	2017	Runoff from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	1.0	0.8 - 1.1	NO	2017	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer
Barium (ppm)	2	2	0.023 (only sample)	N/A	NO	2017	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Lead (ppb)	0	AL = 15	<2.0 (90 <sup>th</sup> %)	N/A	NO	2017	Corrosion of household plumbing; Erosion of natural deposits
None of the samples were found to have Lead levels in excess of the Action Level of 15 ppb.							
Copper (ppm)	1.3	AL = 1.3	0.23 (90 <sup>th</sup> %)	N/A	NO	2017	Corrosion of household plumbing; Erosion of natural deposits
None of the samples were found to have Copper levels in excess of the Action Level of 1.3 ppm.							
<b>Volatile Organic Contaminants (VOCs)*</b>							
TTHMs (ppb)	N/A	80	39.2	16.5 - 52.0	NO	2016-17	By-product of drinking water chlorination
HAA5 (ppb)	N/A	60	25.6	11.2 - 36.5	NO	2016-17	By-product of drinking water chlorination
<b>Residual Disinfectants</b>							
Total Chlorine	MRDL = 4	MRDL = 4	1.9	0.2 - 2.0	NO	2017	Water additive used to control microbes
<b>Unregulated Contaminants (UCs)*</b>							
Bromoform (ppb)	N/A	N/A	0.1 (average)	<0.5 - 0.7	NO	2016-17	By-product of drinking water chlorination
Bromodichloromethane (ppb)	N/A	N/A	8.2 (average)	4.9 - 12.7	NO	2016-17	By-product of drinking water chlorination
Chloroform (ppb)	N/A	N/A	16.3 (average)	5.5 - 34.1	NO	2016-17	By-product of drinking water chlorination
Dibromochloromethane (ppb)	N/A	N/A	3.5 (average)	2.5 - 5.9	NO	2016-17	By-product of drinking water chlorination

\*As required, the City of Conneaut sampled quarterly for VOCs and UCs at four distribution system sites. Conneaut tested for many other possible contaminants, but found none other than those listed in the table.

## Definitions/Key

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

**Maximum Contaminant Level Goal (MCLG):** 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.

**Maximum Contaminant Level (MCL):** The highest levels 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 (MRDL):** The highest level of a disinfectant that is allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Microcystins:** Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.

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

**ppb:** Parts per Billion 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.

**ppm:** Parts per Million 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.

**NTU:** Nephelometric Turbidity Unit

**TTHMs:** Trihalomethanes

**HAA5:** Haloacetic Acids

**90<sup>th</sup> %:** 90<sup>th</sup> Percentile

**< Symbol:** Means results were less than number shown.

**N/A:** Not Applicable

## Need more info?

While we do not hold regular meetings, customers are encouraged to participate by contacting the Conneaut Water Treatment Plant at 440-593-7437

**FOR MORE INFORMATION CONTACT THE CONNEAUT WATER TREATMENT PLANT AT 440-593-7437**

In 2017, the City of Conneaut maintained an unconditional license to operate our water system.