

CITY OF MAUMEE WATER QUALITY REPORT 2017



MAKING DRINKING WATER SAFE

To comply with the Safe Drinking Water Act Amendments, the City of Maumee will be annually issuing a report on monitoring performed on its drinking water. The purpose of this report is to advance consumers understanding of drinking water and heighten awareness of the need to protect water resources.

The City of Maumee is proud to report that no contaminants were detected at levels that exceeded federal standards during 2017. The table included in this report lists the detected constituents. Their presence does not necessarily indicate that water poses a health risk. Many of these contaminants occur naturally.

MAUMEE WATER FACTS...

The City of Maumee is a Class 1 Water Distribution System with an effective and active OEPA approved license to operate from January 1, 2018 to January 30, 2019. License #4800603-1115535-2017

WHERE DOES WATER COME FROM?

The City of Maumee purchases its water from the City of Toledo. The City of Toledo draws its water from Lake Erie, a surface water source. An intake crib, located approximately nine miles east of Toledo and three miles off shore collects raw water. The intake crib is a circular concrete structure, 83 feet in diameter, extending 24 feet below the surface of the lake. Water flows into the crib through 16 ten-foot square openings called ports. The water then flows by gravity through a 9-foot diameter pipe to the Low Service Pumping Station located in Jerusalem Township. From there it is pumped to the Collins Park Water Treatment Plant in East Toledo for processing, before it is distributed to the customers through a piping network. Maumee receives the finished water via the 42-inch transmission mains at Eastgate Road and the Ohio Turnpike. Water is then metered into a one-million gallon reservoir at the Michigan Avenue Pump Station. The City of Maumee pumps from the reservoir to two elevated storage tanks, then

to its customers through an underground network of transmission and distribution mains.

The State has completed a Source Water Assessment for the City of Toledo, which uses surface water drawn from Lake Erie. By their nature, all surface waters are considered to be susceptible to contamination from chemicals and pathogens. The time it would take for a contaminant to travel from our source water to our drinking water intake is relatively short. Although the water system's main intake is located offshore, susceptible of the source water to contamination may be increased by its proximity to the following: municipal sewage treatment plants; industrial wastewater; combined sewer overflows; septic system discharges; open water dredge disposal operations; runoff from agricultural and urban areas; oil and gas production; mining operations; and accidental releases and spills, especially from commercial shipping operations and recreational boating.

The City of Toledo treats its water to meet and exceed drinking water quality standards, but no single treatment protocol 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 Toledo's Drinking Water Source Assessment Report, this can be obtained by calling: 419-936-3021

MORE ABOUT WATER

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).

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. It can pick up substances resulting from the presence of animals or

from human activity. Contaminates 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.

Some people may be more vulnerable to substances found in drinking water than the general population. Immuno-compromised person 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 infections. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency/Center for Disease Control 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).

INFORMATION ABOUT LEAD IN SERVICE LINES AND HOME PLUMBING?

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. The City of Maumee 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.

A list of laboratories certified in the State of Ohio to test for lead may be found at www.epa.ohio.gov/ddagw or by calling 614-644-2752. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA's Safe Drinking Water Hotline at: 1-800-426-4791 or www.epa.gov/safewater/lead.

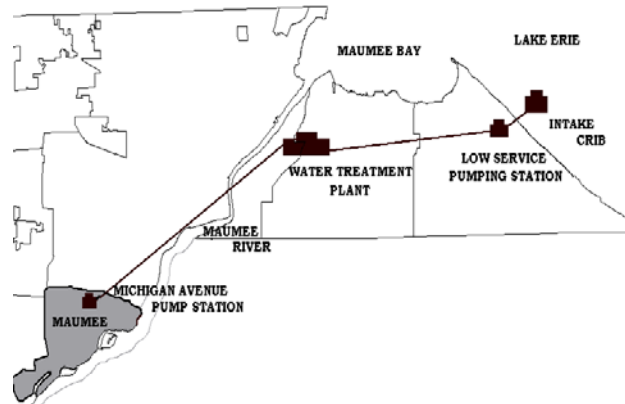
To **print your own** copy of the 2017 CCR go to the city's web site at: <http://www.maumee.org> or you can obtain a printed copy at the municipal building located at 400 Conant Street.

For more information on the (CCR) Consumer Confidence Report or water quality, please contact the City of Maumee's Superintendent of Pumping and Distribution at 897-7185 or by Email: water@maumee.org

Public interest and participation in our community's decisions affecting drinking water is encouraged. **Regular City Council meetings occur at 7:30pm on the First and Third Monday of each Month.** Meetings are held at the Maumee City Council Chambers in the Municipal Building located at 400 Conant Street.

Harmful Algal Blooms (HAB)

Cyanobacteria (also known as blue green algae) are microscopic organisms found naturally in surface water that can sometimes multiply to form harmful blooms (HAB's). HAB's can potentially produce toxins capable of causing illness or irritation—sometimes even death—in pets, livestock and humans. For more information on Harmful Algal Bloom Response go to: <http://epa.ohio.gov/Portals/28/documents/HABs/PWS-HAB-Response-Strategy-2014.pdf>.



The City of Maumee continuously monitors your drinking water according to Federal and State laws. The table below shows the parameters that were detected in the water from January 1 to December 31, 2017 unless otherwise noted. These test results confirm that your drinking water meets all Federal and State requirements, and that ALL DETECTED CONTAMINANTS ARE BELOW ALLOWED LEVELS.

Parameter	Sample Year	Units	Level Found	Range of Detection	MCLG	MCL	Violation ?	Typical source of Contaminant
Inorganic Parameters								
Chlorite	2017	ppm	0.18	0.06 - 0.19	0.5	1	No	Byproduct of drinking water disinfection
Fluoride	2017	ppm	1.07	0.82 - 1.20	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth.
Nitrate	2017	ppm	3.25	<0.2 - 3.25	10	10	No	Runoff from fertilizer use, Erosion of natural deposits

Volatile Organic Parameters

TTHM (Total Trihalomethanes)	2017	ppb	43.34	19.2 - 93.8	none	80	No	By-products of drinking water disinfection
HAA5 (Haloacetic Acids)	2017	ppb	13.7	4.7 - 29.1	none	60	No	By-products of drinking water disinfection

****Third Quarter THM for 2015 sampling period exceeded the mcl , but compliance is based on the running annual average and there are No Violations.**

Synthetic Organic Parameters including Pesticides and Herbicides

Atrazine	2017	ppb	0.18	nd	3	3	No	Runoff from herbicide used on row crops
Simazine	2016	ppb	18.08	6.0 - 34.2	none	60	No	Herbicide runoff

Microbiological Parameters

Turbidity	2017	ntu	0.9	0.05 - 0.90	none	TT	No	Soil runoff, suspended matter in lake water
TOC	2017	see TOC	2.82	2.82 - 3.86	none	TT	No	Naturally present in the environment

Lead and Copper Monitoring (sampled in the distribution system at individual taps)

Copper	2017	ppb	21	nd - 0.21	1.3	AL=1.3	No	Corrosion of household plumbing
Lead	2017	ppb	8	nd - 0.8	15	AL=15	No	systems; erosion of natural deposits

Residual Disinfectants

Parameter	Sample Year	Units	Level Found	Range	MRDLG	MRDL	Violation?	Likely Sources
Total Chlorine	2017	ppm	1.41	1.02 - 1.62	4	4	no	Additive used to control microbes

Lead and Copper - The level is based on the 90th% of 30 samples taken from residents homes through out the City of Maumee

2017 was the year for Lead and Copper sampling, and were No Violations.

Next Lead and Copper sampling will be in . in 2018

Key**MCL** = Maximum Contaminant Level**MCLG** = Maximum Contaminant Level Goal**nd** = Not Detected**AL** = Action Level**ntu** = Nephelometric Turbidity unit (measures clarity)**ppb** = parts per billion**ppm** = parts per million**TT** = Treatment Technique**na** = Not Applicable**Definitions**

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 Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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

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.

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 contaminant.

Turbidity: measures water cloudiness. Toledo monitor it daily because it is a good indicator of their filtration system effectiveness. The turbidity limit set by the EPA states that all samples must be below 1 ntu and that 95% of the daily samples must be lower than 0.3 ntu.

TOC: Total Organic Carbon: The value reported under "Level Found" for TOC is the lowest running annual average ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of less than one indicates a violation of the TOC removal requirements. The value reported under the "Range" for TOC is lowest monthly ratio to the highest monthly ratio. Toledo remained in compliance with TOC removal requirements.

Parts per Million (ppm) or Milligrams per Liter (ug/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.

Part per Billion (ppb) or Micrograms per Liter (ug/L) are units of measure for concentration of a contaminant. A Part per billion corresponds to one second in 31.7 years.

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

UNREGULATED CONTAMINANTS IN DRINKING WATER

Parameter	Sample	Units	Level	Range of	MCLG	MCL	Violation	Typical source of Contaminant
Chromium, Hexavalent	2013	ppb	0.232	0.19 - 0.232	nd	nd	NO	
Chromium, Total	2013	ppb	0.24	0.20 - 0.24	nd	nd	NO	
Chlorate	2013	ppb	100	39.6 - 100	nd	nd	NO	
Molybdenum, Total	2013	ppb	2.11	nd - 2.11	nd	nd	NO	
Strontium, Total ³	2013	ppb	151	86 - 151	nd	nd	NO	
Vanadium, Total	2013	ppb	0.85	0.423 - 0.850	nd	nd	NO	

Sodium* 2016 ppm 32.2 8.7 - 32.2 nd nd No Naturally occurring

*This information is provided for those concerned with sodium in their diet; 33.2ppm of sodium equ: to 7.6 milligrams of sodium per 8 ounce glass of water.

Microcystin 2016 ppb nd nd Toxins produced by harmful algal blooms

Microcystin is a toxin produced by harmful algal blooms. The following thresholds were developed by the United States Environmental Protection Agency (USEPA) The 0.3ppb Do Not Drink Advisory Threshold is for children 6 and under. While the 1.6ppb Do Not Drink Advisory Threshold is for anyone 6 and older.

http://epa.ohio.gov/Portals/28/documents/HABs/PWS_HAB_Response_Strategy_2015.pdf.

Cryptosporidium

The City of Toledo Water Department has completed the second round of source water monitoring required by the Long Term 2 Enhanced Surface Water Treatment Rule. Giardia and Cryptosporidium. Only one cell of Cryptosporidium was detected during the test period from April 2015 through March 2017. It was not detected in the finished water. In 2005, 21 samples were taken from Toledo's raw water supply. Cryptosporidium was not detected in any of these samples. 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% removal. 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. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease. It may also be spread through means other than drinking water.