City of Toledo Water Quality Report City of Toledo

Consumers have relied on the City of Toledo to produce and deliver excellent drinking water that meets or exceeds all quality standards for more than 140 years.

In 2021, water treatment professionals at Collins Park Water Treatment Plant produced more than 24 billion gallons of high-quality drinking water for some 500,000 people in Toledo and Lucas County, portions of Fulton and Wood Counties and for South County Water in Monroe, Michigan. July 1, 2022

Dear Toledo residents and neighbors,

Excellent drinking water is important to our city and region. I am pleased to present the 2021 Water Quality Report with information about our drinking water, the source of our water, testing results that take place throughout the year, and other helpful information.

Construction began in 2018 on ozone technology as an additional water treatment option, and it is now in service to protect drinking water from harmful algal bloom toxins and other contaminants. Treatment basins 5 and 6 and filters 21- through 30 were modernized to complement the ozone process.

By the end of 2021, 80 percent of the projects at the Collins Park Water Treatment Plant were completed and 20 percent were under construction. The program remains within budget and on schedule for completion in 2023. We invite you to monitor the progress at <u>www.ToledoH2O.com</u>.

General plans were approved by Ohio Environmental Protection Agency for the development of a reservoir as an alternate water source , a project to construct elevated water storage tanks and additional pumping

facilities to further enhance the distribution system.

Thank you for supporting these important initiatives to maintain a healthy water system.

(1)ade Kap

Sincerely, Wade Kapszukiewicz

Mayor, City of Toledo



2021 Drinking Water Quality Results

The table below shows the results of the Toledo Water Treatment Plant's water quality tests for 2021. The EPA requires regular sampling to ensure drinking water safety. Samples were collected for dozens of different contaminants, most of which were not detected in Toledo's water supply. Those that were detected are included in the table below. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these

Regulated Contaminants in Drinking Water

Parameter	Year	Units	Level Found	Range	MCLG	MCL	Violation?	Likely Sources		
Chlorite	2021	ppm	0.18	<0.10 - 0.19	0.8	1.0	No	Byproduct of drinking water disinfection		
Fluoride	2021	ppm	1.12	1.04–1.19	4	4	No	Water additive to promote strong teeth		
Nitrate	2021	ppm	2.88	<0.2 – 2.88	10	10	No	Fertilizer runoff; septic tank leach- ing, sewage; erosion of natural de- posits		
TTHM ¹	2021	ppb	48.2	10.5 -108.6	N/A	80	No	Byproducts of drinking water disinfection		
HAA5 ¹	2021	ppb	15.9	6.0—35.0	none	60	No	Byproducts of drinking water disinfection		
Turbidity ²	2021	ntu	0.11	0.04-0.22	none	TT	No	Soil runoff, suspended matter in lake water		
TOC ³	2021	see note ³	2.07	1.87 – 2.63	none	TT	No	Naturally present in the environment		

Parameter	Year	Units	90% of the test levels were less than AL	Individual result greater than AL	MCLG	MCL	Violation?	Likely Sources		
Lead	2021	ppb	4	none	0	AL=15	No	Corrosion of household plumbing and erosion of natural deposits		
0 out of 55 samples was found to have lead levels in excess of the lead action level of 15 ppb.										
Copper	2021	ppb	12	none	1300	AL= 1300	No	Corrosion of household plumbing		

Parameter	Year	Units	Level Found	Range	MLDG MRDL		Violation?	Likely Sources	
Total Chlorine	2021	ppm	1.08	0.93- 1.13	4	4	No	Additive used to control microbes	
Chlorine Dioxide	2021	ppm	0.3	<0.2 – 0.2	0.8	0.8	No	Additive used to control microbes	

1. TTHM stands for Total Trihalomethanes. HAA5 stands for Haloacetic Acids. MCL compliance for both TTHM and HAA5 is based on the highest locational running annual average (shown as level found). The range shows the highest and lowest single detects from quarterly compliance monitoring at twelve different sites in the distribution system.

2. Turbidity is a measure of the cloudiness of the water. We monitor it daily because it is a good indication of the effectiveness of our filtration system. 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. In 2021, 100% of our samples were below 0.3 ntu.

2021 Drinking Water Results

3. TOC stands for Total Organic Carbon. The value reported under "Level Found" for TOC is the lowest quarterly running annual average ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1.0) indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC. The value reported under "Range" is the lowest monthly average ratio to the highest monthly average

Unregulated Contaminants

Parameter	Sample Year	Units	Level Found	Range	MCLG	MCL	Violation?
Sodium ¹	2021	ррт	15.96	10.76-26.35	na	na	No

1. This information is provided for those concerned with sodium in their diet; 15.96 mg/l of sodium equates to 3.9 milligrams of sodium per 8 ounce glass of water.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2018 City of Toledo Water Treatment participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the 2018 UCMR 4 results please call Water Treatment Plant at 419 936-3021.

For more information on UCMR4 go to: <u>https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule</u>

Water Quality Terminology

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 like 1 teaspoon of salt in an Olympic-sized pool.

Maximum Contaminant Level (MCL) – The MCL is 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. MCLs are set at very stringent levels by State and Federal governments.

Maximum Contaminant Level Goal (MCLG) – The MCLG is 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 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 contaminants.

Nephelometric Turbidity Unit (ntu) – A measure of water clarity.

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

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

Contact Time (CT) – Time required to deactivate microbes with chlorine.

Picocuries per liter (piC/l) – Common measurement of radioactivity.

nd – Not detectable.

na – Not applicable.

Toledo Water Meets or Exceeds All Drinking Water Quality Standards

The Ohio EPA 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, susceptibility 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 even surpass 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, which can be obtained by calling 419-936-3021 or at www.toledo.oh.gov/residents/water/quality.

In 2021 Toledo had an unconditional license to operate its water system.

Toledo's Water Treatment Plant has an outstanding record of success, consistently maintaining compliance with drinking water quality regulations. Its outstanding performance in 2021 was achieved through a proactive commitment by its staff to produce a higher level of drinking water safety and reliability than is currently required by law.

What are sources of contamination to drinking water?

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 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 Federal 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. Immunocompromised 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).

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. Forty-eight (48) samples were collected and tested for Giardia and Cryptosporidium. Only one cell of Cryptosporidium was detected in raw water during the testing period from April 2015 to March 2021. 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, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

For information on what residents can do to protect our source water, please visit www.toledolakeerie.clearchoicescleanwater.org.

Drinking Water Notice

A monitoring requirement was not met by the City of Toledo

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the First Quarter of 2022 time period we did not fully monitor for Total Haloacetic Acids (HAA5), and therefore cannot be sure of the quality of our drinking water during that time. A set of twelve samples were collected, however the laboratory where the samples were sent for analysis lost one sample in an instrument malfunction and we were not notified in time to replace the sample. The other eleven samples all passed drinking water standards.

What should I do?

This notice is to inform you that the City of Toledo did not fully monitor and report results of Total Haloacetic Acids (HAA5). Toledo has never had a violation of the maximum contaminant level for Total Haloacetic Acids, (HAA5), so there is no public health concern at this time. You do not need to take any actions in response to this notice.

What is being done?

The City of Toledo will take steps to ensure that adequate monitoring will be performed in the future

A set of quarterly samples were taken on May 11, 2022, all samples passed drinking water standards.

Sample results and additional information may be obtained by contacting the Toledo Water Department: Jeff Martin, Chief Chemist (419)245-1717 3040 York St., Toledo, OH 43605

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

PWSID OH4801411 Facility ID DS1

Date distributed July 1, 2022