City of Toledo

2022 Water Quality Report

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 2022, 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, 2023

Dear Toledo residents and neighbors,

Excellent drinking water is important to our city and region. I am pleased to present the 2022 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 was completed on basins 3 & 4 and filters 11 through 20 were modernized to complement the newly completed ozone process in 2022.

By the end of 2022, 90 percent of the construction at the Collins Park Water Treatment Plant was competed and 10 percent remains under construction. The program remains within budget and on schedule for completion in 2023. We invite you to monitor the progress at www.ToledoH2O.com.

Plans are progressing for the replacement o f the 78 inch diameter raw water main, the development of a reservoir as an alternate water source, and a project to construct elevated water storage tanks to further enhance the distribution system.

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

Sincerely,

Wade Kapszukiewicz

Wade Kapszukiewicz
Mayor, City of Toledo

2022 Drinking Water Quality Results

The table below shows the results of the Toledo Water Treatment Plant's water quality tests for 2022. 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 contaminants do not frequently change.

Regulated Contaminants in Drinking Water

Parameter	Year	Units	Level Found	Range	MCLG	MCL	Violation?	Likely Sources
Chlorite	**2022**	ppm	0.07	<0.10 – 0.14	0.8	1.0	**No**	Byproduct of drinking water disinfection
Fluoride	**2022**	ppm	0.99	0.92– 1.06	4	4	**No**	Water additive to promote strong teeth
Nitrate	**2022**	ppm	2.67	<0.2 – 2.67	10	10	**No**	Fertilizer runoff; septic tank leaching, sewage; erosion of natural deposits
TTHM[1]	**2022**	ppb	50.5	28.6-75.0	N/A	80	**No**	Byproducts of drinking water disinfection
HAA5[1]	**2022**	ppb	17.7	11.3—23.4	none	60	**No**	Byproducts of drinking water disinfection
Turbidity[2]	**2022**	ntu	0.07	0.03– 0.18	none	TT	**No**	Soil runoff, suspended matter in lake water
TOC[3]	**2022**	see note[3]	1.32	0.96– 1.77	none	TT	**No**	Naturally present in the environment

Parameter	Year	Units	90% of the test levels were less than AL	Individual results greater than AL	MCLG	MCL	Violation?	Likely Sources
First Half	**2022**	ppb	4		0	AL=15	**No**	Corrosion of household plumbing and erosion of natural deposits
Lead	**2022**	ppb		121	0	AL=15	**No**	Corrosion of household plumbing and erosion of natural deposits
	2022	ppb		22	0	AL=15	**No**	Corrosion of household plumbing and erosion of natural deposits
	2022	ppb		191	0	AL=15	**No**	Corrosion of household plumbing and erosion of natural deposits
	2022	ppb		21	0	AL=15	**No**	Corrosion of household plumbing and erosion of natural deposits
Copper	**2022**	ppm	0.012	0	1.3	AL=1.3	**No**	Corrosion of household plumbing
Second Half	**2022**							
Lead	**2022**	ppb	4	0	0	AL=15	**No**	Corrosion of household plumbing and erosion of natural deposits
	4 out of 131 samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Copper	**2022**	ppm	0.012	none	1.3	AL=1.3	**No**	Corrosion of household plumbing

Regulated Contaminants in Drinking Water

Parameter	Year	Units	Level Found	Range	MLDG	MRDL	Violation?	Likely Sources
Total Chlorine	**2022**	ppm	1.08	0.93- 1.13	4	4	**No**	Additive used to control microbes
Chlorine Dioxide	**2022**	ppm	0.3	<0.2 – 0.3	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. Chemist monitor tap turbidity six times a day and all filters are continuously monitored for turbidity 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 2022, 100% of our samples were below 0.3 ntu.

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]	**2022**	ppm	14.25	8.80-30.17	na	na	**No**

1. This information is provided for those concerned with sodium in their diet; 14.25mg/l of sodium equates to 3.4 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:
https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule

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 back-yard 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.

Source Water Assessment Report

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/services/public utilities/water-treatment/drinking-water-quality-information.

In 2022 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 2022 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;

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. 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).

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 2022. 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.

Lead Educational Information

Even legally "lead-free" plumbing may contain up to eight percent lead, so it makes good sense to adopt and follow these practices: **Run the cold water *before* use** – If present, lead levels are likely at their highest when water has been sitting in the pipe for several hours. Clear this water from pipes by running the cold water before use. Running the cold faucet until water feels colder allows you to draw fresh water from the main. **Start with cold water for cooking and drinking** – Always cook and prepare baby formula with fresh cold water, because hot water dissolves lead more quickly, resulting in higher levels in water. **Clean aerators** – Aerators are small attachments at the tips of faucets which regulate the flow of water. In locations where lead pipes or fixtures are present, small particles of lead can accumulate in aerator screens. It's a good idea to remove your aerators at least monthly and clean

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 Toledo 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 800-426-4791or at http://www.epa.gov/safewater/lead.

The City of Toledo treats the water to be alkaline so the pipes scale slightly. This means should a residence have lead piping or solder, the water usually comes in contact with scale and not lead. Additional treatment causes lead to become hard so that it doesn't dissolve easily. Finally, the city for many years has a city wide distribution lead testing program.

Public Participation Information

Public participation and comment are encouraged at Toledo City Council which meets regularly every other Tuesday at 4 pm at One Government Center. Please visit www.toledo.oh.gov/ government/city-council for its calendar, meeting notices, legislation and audio minutes or call 419-245-1050. For more information on your drinking water contact Jeff Calmes 419-936-3020.