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, 2022 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.

**Regulated Contaminants in Drinking Water** 

Parameter	Sample	Units	Level	Range of	MCLG	MCL	Violation?	Typical source of Contaminant		
	Year		Found	Detection						
Inorganic Contaminants										
Chlorite (Toledo Sampling results)	2022	ppm	0.07	<0.10 - 0.14	0.8	1	No	Byproduct of drinking water disinfection		
Fluoride (Toledo Sampling results)	2022	ppm	0.99	0.92 - 1.06	4	4	No	Water additive which promotes strong teeth.		
Nitrate (Toledo Sampling results)	2022	ppm	2.67	<0.2 - 2.67	10	10	No	Fertilizer runoff; septic tank leaching, sewage; Erosion of natural deposits		

Disinfectants and Disinfection By-Products

Chlorine	2022	ppm	0.69	0.5 - 0.9	MRDLG =	MRDL = 4	No	Water additive used to control microbes
HAA5 (Haloacetic Acids)	2022	ppb	8.83	3.7 - 13.9	none	60	No	By-products of drinking water disinfection
TTHM (Total Trihalomethanes)	2022	ppb	37.59	18.5 - 57.1	N/A	80	No	By-products of drinking water disinfection

Microbiological Parameters

Turbidity <sup>1</sup> (Toledo Sampling results)	2022	ntu	0.07	0.03 - 0.18	none	π	No	Soil runoff, suspended matter in lake water
TOC <sup>2</sup> (Toledo Sampling results)	2022	see note2	1.32	0.96 - 1.77	none	π	No	Naturally present in the environment

- 1) Turbidity: is a measure of the cloudiness of water and is an indication of the effectiveness of the filtration system. The turbidity limit set by the EPA is 1 ntu in 95% of the samples analyzed each month and shall not exceed 0.3 ntu at any time. As reported above, in 2022, 100% of the City of Toledo's samples were below 0.3 ntu.
- 2) TOC: 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 the "Range" for TOC is lowest monthly average ratio to the highest monthly average.

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

Contaminants (Units)	Sample Year	Individual Results over the AL	90% of test levels were less than AL	Range Detected	Action Level (AL)	MCLG	Violation	Typical Source of Contaminants
Lead (ppb)	2022	0	< 4	< 4 - 8	15 ppb	0 ppb	No	Corrosion of household plumbing systems: erosion of natural deposits
Copper (ppm)	2022	N/A	0.013	nd - 0.020	1.3 ppm	1.3 ppm	No	Corrosion of household plumbing systems: erosion of natural deposits

<sup>\*\*\*</sup>Lead and Copper - The level is based on the 90th% of 60 samples taken from residents homes through out the City of Maumee\*\*\*

## Residual Disinfectants

Parameter	Sample Year	Units	Level Found	Range	MRDLG	MRDL	Violation?	Typical Source of Contaminants
Total Chlorine (Toledo sampling results)	2022	ppm	1.08	0.93 - 1.13	4	4	No	Additive used to control microbes
Chlorine Dioxide (Toledo sampling results)	2022	ppm	0.3	<0.2 - 0.3	0.8	0.8	No	Additive used to control microbes

## **UNREGULATED CONTAMINANTS IN DRINKING WATER**

Parameter	Sample Year	Units	Level Found	Range	MRDLG	MRDL	Violation?	Typical Source of Contaminants
Sodium¹ (Toledo sampling results)	2022	ppm	14.25	8.80 - 30.17	na	na	No	Naturally occurring

<sup>1.</sup> This information is provided for those concerned with sodium in their diet; 14.25 mg/l of sodium equates to 3.4 milligrams of sodium per 8 ounce glass of water.

<sup>\*\*\*0</sup> out of 60 Samples were found to have lead levels in excess of the Copper (AL) action level of 1.3 ppm (parts per million)\*\*\*

<sup>\*\*\*0</sup> out of 60 Samples were found to have lead levels in excess of the Lead (AL) action level of 15ppb (parts per billion)\*\*\*

## UNREGULATED CONTAMINANTS IN DISTRIBUTION SYSTEM

Parameter	Sample Year	Units	Level Found	Range	MRDLG	MRDL	Violation?	Typical Source of Contaminants
Manganese	2018	ppb	0.478	<0.4 - 0.777	na	na	No	
Haloacetic acid (HAA5)	2018	ppb	12.9	5.26 - 17.54	na	na	No	
Haloacetic acid (HAA6Br)	2018	ppb	11.22	1.72 - 14.37	na	na	No	
Haloacetic acid (HAA9)	2018	ppb	20.81	9.4 - 26.47	na	na	No	

Unregulated contaminants are those for which EPA has no established drinking water standards. The purpose of unregulated contaminant monitoring to assist EPA in determining the occurrence of unregulated contaminants in drinking water and weather future regulation is warranted. In 2020 the Maumee Water Division participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of these results please call Maumee Water Division at 419-897-7185. Maumee Water Division will be participating in UCMR5 in 2023.

For more information on UCMR5 go to:

https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule

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 strigent levels by State and Federal governments.

**Maximum Contaminant Level Goal (MCLG) -** The MCLG is 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.

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. MRDJGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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. Or 4 teaspoons of salt in a standard 24-foot backyard pool.

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

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 which a water system must follow.

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

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

Picocuries per liter (piC/I) - Common measurement of radioactivity

nd - Not Detected

na - Not applicable

## **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 during the test period from April 2015 through March 2022. 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, immuno-compromised people are at greater risk of developing life-threating 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. It may also be spread through means other than drinking water.