



# 2013

## City of Toledo

### Drinking Water Quality Report

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D. Michael Collins

Dear Citizens and Neighbors,

I would like to take this opportunity to introduce the 2013 Consumer Confidence Report regarding the quality of your drinking water.

City of Toledo Public Utilities personnel manage a system which produces and transports 26 billion gallons of high-quality drinking water each year to an estimated 500,000 people in the greater metropolitan Toledo area including Lucas County, and portions of Wood, Fulton and Monroe Counties. Surface water is drawn from Lake Erie and pumped to the Collins Park Water Treatment Plant for treatment. Plant operations purify and transport an average of 73 million gallons per day (MGD) with a capacity of 120 MGD to enhance the lives of residents and support business and industry.

In April 2013 Toledo adopted a comprehensive capital improvement plan to address \$314 million in needed upgrades at the Collins Park Water Treatment Plant and to the City's water distribution system. Toledo moved forward immediately to begin an aggressive construction implementation schedule approved by the Ohio Environmental Protection Agency. Water system improvements initiated in 2013 at a cost of more than \$28 million include:

- Water Treatment Main Building and Roof Rehabilitation
- Chlorine Disinfection Facility
- Sedimentation Basin Access Hatch Rehabilitation
- Chemical Feed Improvements
- Heatherdowns Pumping Station Rehabilitation
- Spent Lime Lagoon Cleaning

The Water Treatment Division of the Department of Public Utilities continues to implement the Capital Improvement Plan for the Collins Park Water Treatment Plant, concentrating on site-specific actions required by Ohio EPA to maintain and enhance our ability to serve Toledo and the surrounding population and industries with superior award-winning water.

In addition to the many plant upgrades being conducted over the next multiple years, we are improving upon our present capabilities to meet new and more stringent testing requirements by expanding the water testing laboratory, installing new testing equipment, and cross-training individuals to optimize flexibility.

Thank you for being our customer and for your support of these positive initiatives. We appreciate that you live and work with us in Toledo and surrounding communities.

*D. Michael Collins*

D. Michael Collins  
Mayor

# 2013 Drinking Water Quality Results

The tables below and on the next page show the results of the Toledo Water Treatment Plant's water quality tests for 2013. The EPA requires regular sampling to ensure drinking water safety. Samples were collected for a great number of different contaminants, most of which were not detected in Toledo's water supply. Those that were detected are included in the table below. There were no violations and our water was in compliance with all state and federal water quality standards. 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

### Inorganic Parameters

Parameter	Sample Year	Units	Level Found	Range	MCLG	MCL	Violation?	Likely Sources
Chlorite	2013	ppm	0.50	0.04-0.50	0.5	1.0	no	Byproduct of drinking water disinfection
Fluoride	2013	ppm	1.11	0.81-1.11	4	4	no	Water additive to promote strong teeth
Nitrate	2013	ppm	2.86	0.2-2.86	10	10	no	Fertilizer runoff; septic tank leaching, Sewage; erosion of natural deposits

### Synthetic Organic Parameters including Pesticides and Herbicides

Atrazine	2013	ppb	0.16	nd-0.16	3	3	no	Runoff from herbicide used on row crops
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### Volatile Organic Parameters

TTHM <sup>1</sup>	2013	ppb	62.3	10.2-105	0	80	no	Byproducts of drinking water disinfection
HAA5 <sup>1</sup>	2013	ppb	17.4	<6.0-30.9	none	60	no	Byproducts of drinking water disinfection

### Microbiological Parameters

Turbidity <sup>2</sup>	2013	ntu	0.43	0.04-0.43	none	TT	no	Soil runoff, suspended matter in lake water
TOC <sup>3</sup>	2013	see note <sup>3</sup>	3.11	2.44-3.95	none	TT	no	Naturally present in the environment

### Residual Disinfectants

Total Chlorine	2013	ppm	1.29	1.10-1.60	4	4	no	Additive used to control microbes
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### Copper and Lead Testing

Parameter	Sample Year	Units	90 <sup>th</sup>	Sites >AL	MCLG	MCL	Violation?	Likely Sources
Copper <sup>4</sup>	2011	ppm	.020	None	1.3	AL=1.3	no	Corrosion of household plumbing and erosion of natural deposits
Lead <sup>4</sup>	2011	ppb	7	One <sup>4</sup>	15	AL=15	no	

1. TTHM stands for Total Trihalomethanes. HAA5 stands for Haloacetic Acids. MCL compliance for both TTHM and HAA5 is based on the highest 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 2013, 97.3% 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 running annual average ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of great 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 removal requirements. The value reported under the "Range" for TOC is the lowest monthly ratio to the highest monthly ratio. Toledo remained in compliance with TOC removal requirements.

4. Because of favorable past results, copper and lead testing is only required every three years. Compliance for copper and lead is based on the 90<sup>th</sup> percentile, where 9 out of 10 samples must be below the action level (AL). Because one testing site was above the AL for lead (which is not a violation), we are including this important information: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline: 800-426-4791. ([Continued next page](#))

## Unregulated Contaminants

Parameter	Sample Year	Units	Level Found	Range	MCLG	MCL	Violation?	Likely Sources
Sodium*	2013	ppm	33.2	10-33.2	na	na	no	Naturally occurring

\*This information is provided for those concerned with sodium in their diet; 33.2 ppm of sodium equates to 7.90 milligrams of sodium per 8 ounce glass of water. Some of the Unregulated Contaminants Monitoring Results were invalidated after laboratory analysis found results could not be confirmed due to outside contamination. Resampling of Unregulated Contaminants occurred in 2014 and the final results will be submitted in the 2014 Consumer Confidence Report.

## 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.

**Nd** – Not detectable.

**Na** – Not applicable.

## Health and Safety Information

*City of Toledo drinking water meets or surpasses all federal and state laws. The following is mandatory language provided by the EPA:*

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline, 800-426-4791**.

The sources of both tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive materials; and can also pick up substances resulting from animal or human activity. Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, septic systems, and agricultural and urban runoff.
- *Radioactive contaminants*, which are naturally occurring or the result of oil and gas production, or mining activities.

To ensure that tap water is safe, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) establishes limits for contaminants in bottled water, which must provide the same protection for public health.

## Source Water Assessment Report: Toledo Water Meets or Exceeds All Drinking Water Quality Standards

The State of Ohio 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.

Toledo's Water Treatment Plant has an outstanding record of success, consistently maintaining compliance with drinking water quality regulations. Its outstanding performance in 2013 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.

## 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 those undergoing chemotherapy, who have undergone organ transplants, with HIV/AIDS or other immune system disorders, and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Federal guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the **EPA's Safe Drinking Water Hotline at 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 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 thirty seconds to two minutes before using water for drinking and 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](http://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** or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Information about Cryptosporidium

In 2005, 21 samples were taken from Toledo's raw water supply. Cryptosporidium was not detected in any of these samples.

## License to Operate (LTO) Status Information

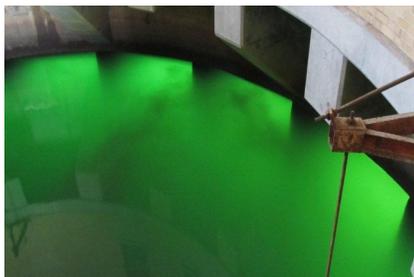
The City of Toledo has a current, unconditional license to operate its water system.

## How to Participate in Decisions Concerning Your Drinking Water

Toledo City Council meets every other Tuesday at 4 pm at One Government Center. Please visit [www.toledo.oh.gov/government/city-council](http://www.toledo.oh.gov/government/city-council) for access to calendars, council and committee meeting notices, pending and enacted legislation as well as audio minutes. Call 419-245-1050 for more information.

## For More Information about Your Drinking Water

Additional information including archived Water Quality Reports and Frequently Asked Questions about Water Quality is available online at [www.toledo.oh.gov/services/public-utilities/water-treatment/drinking-water-quality-information](http://www.toledo.oh.gov/services/public-utilities/water-treatment/drinking-water-quality-information). Specific questions about this report may be directed to the Collins Park Water Treatment Plant at 419-936-3021. While the Water Treatment Plant is staffed with an Ohio EPA certified Chemist twenty-four hours a day seven days a week, the chemist is not always available to answer the phone as they may be gathering samples or running tests. **The U.S. Environmental Protection Agency operates the Safe Drinking Water Hotline at 800-426-4791.**



Source water intake crib on Lake Erie.



Collins Park Water Treatment Plant.