

CITY OF TOLEDO 2009 DRINKING WATER QUALITY REPORT

Dear Fellow Citizens,

As you know, the City of Toledo furnishes your drinking water. Therefore, it is my privilege to present this Water Quality Report to you. Our mission is to reliably produce safe and wholesome drinking water for our many customers throughout our region. I am confident you will agree that we have done an excellent job in this regard over the years.

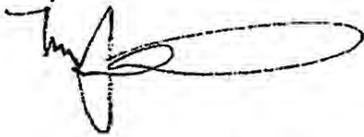
This Water Quality Report provides a great synopsis regarding the premium quality of the water we supplied to you throughout 2009. Included are details about where your water comes from, what it contains and how we transform it into wholesome "Toledo Water." Please take a moment to read the contents of this report because it will clearly illustrate that we are proactively achieving our mission.

Our terrific staff at the Collins Park Water Treatment Plant work 24 hours a day, 7 days per week to produce over 27 billion gallons per year of water which surpasses all state and federal requirements. Their daily tasks include in-depth laboratory analyses of our raw and finished water. As a result, our customers receive the highest quality drinking water available in the region.

That notwithstanding, we continue to make the necessary capital and operational improvements which allow us to improve the taste of our water while also helping us meet our zebra mussel, quagga mussel and other environmental challenges.

I am very proud of the quality of our water and the professional staff which produces it. "Toledo Water - The Champagne of the Great Lakes" says it all.

Sincerely,



Michael P. Bell
Mayor



Where Does Your Drinking Water Come From?

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, its proximity to the following increases the susceptibility of the source water to contamination: 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; 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.

2009 System-Wide Improvements

The City of Toledo's Water Plant has an outstanding record of success, consistently maintaining 100% compliance with drinking water quality regulations. Our outstanding performance in 2009 was achieved through a proactive commitment by our staff to produce a higher level of drinking water safety and reliability than is currently required by law. Over 454,000 customers in the greater Toledo area benefit from the City's proactive approach to drinking water quality. Many water system improvements and achievements were made in 2009 to keep our water system functioning at peak performance levels and to maximize service reliability and value:

- Initiated start-up of the new potassium permanganate feed facility for year-round feeding capabilities.
- Rebuilt "Flocculation Basin 3." Replaced shaft, bearings and paddles.
- Started-up a 270-ton maximum capacity carbon dioxide storage system that provides the plant with adequate storage capacity.
- Upgraded Supervisory Control And Data Acquisition (SCADA) server and replaced an operator station for improved monitoring and system reliability.
- Replaced High Service Pump Station vacuum pumps to improve pump priming capability.
- Replaced four chlorinators to update the chlorine feed facility.
- Replaced the high pressure wash pump for the sludge dewatering facility plate washer.
- Added the Berkey Pump station to supply the residents of Berkey, Ohio, with water from the City of Toledo.

El informe contiene informacion importante sobre la calidad del agua en su comunidad. Traduzcalo o hable con alguien que lo entienda bien.

2009 Water Quality Results

The table below shows the results of the Toledo Water Treatment Plant's water quality tests for 2009. 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. 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	2009	ppm	0.23	0 - 0.23	0.8	1.0	no	Byproduct of drinking water disinfection
Fluoride	2009	ppm	1.15	0.83 - 1.15	4	4	no	Water additive to promote strong teeth
Nitrate	2009	ppm	2.74	nd - 2.74	10	10	no	Fertilizer runoff; septic tank leaching, sewage; erosion of natural deposits

Synthetic Organic Parameters including Pesticides and Herbicides

Atrazine	2009	ppb	1.3	0.35 - 1.3	3	3	no	Runoff from herbicide used on row crops
Simazine	2009	ppb	0.12	nd - 0.12	4	4	no	Herbicide runoff

Volatile Organic Parameters

TTHM ¹	2009	ppb	47.6	13.7 - 75.8	0	80	no	Byproducts of drinking water disinfection
HAA5 ¹	2009	ppb	16.6	4.1 - 22.2	none	60	no	Byproducts of drinking water disinfection

Microbiological Parameters

Turbidity ²	2009	ntu	0.28	0.04 - 0.28	none	TT	no	Soil runoff, suspended matter in lake water
TOC ³	2009	see note ³	1.83	1.83 - 1.92	none	TT	no	Naturally present in the environment

Residual Disinfectants

Total Chlorine	2009	ppm	0.87	0.85 - 0.87	MRDLG 4	MRDL 4	no	Additive used to control microbes
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Copper and Lead Testing and Bacteriological Parameters

Parameter	Sample Year	Units	90th	Sites Above AL	MCLG	MCL	Violation?	Likely Sources
Copper ⁴	2008	ppm	.019	None	1.3	AL=1.3	no	Corrosion of household plumbing,
Lead ⁴	2008	ppb	6	One ⁴	15	AL=15	no	and erosion of natural deposits

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). In addition to quarterly compliance monitoring of TTHM and HAA5, the City of Toledo conducted an Initial Distribution System Evaluation (IDSE) intended to identify locations in our distribution system with elevated concentrations of disinfection byproducts (DBPs). DBPs are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. The results of the IDSE were included in determining the minimum and maximum values shown under the "range" heading.
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. All of our samples were below these requirements, indicating that our filtration system was working properly.
3. TOC stands for 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 greater than one (1) 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.
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 90th percentile, where 9 out of 10 samples must be below the action level (AL). Because one testing site exceeded the AL for lead, 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)."

UNREGULATED CONTAMINANTS

Parameter	Sample Year	Units	Level Found	Range	MCLG	MCL	Violation?	Likely Sources
Metolachlor	2009	ppb	0.42	na	na	na	no	Broad spectrum herbicide
Sodium*	2009	ppm	43.2	10.1 - 43.2	na	na	no	Naturally occurring

*This information is provided for those concerned with sodium in their diet; 43.2 ppm of sodium equates to 10.2 milligrams of sodium per 8 ounce glass of water.

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 which 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

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

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 storm water 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.

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 30 seconds to two 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 <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 our water system.

How Do I Participate in Decisions Concerning My Drinking Water?

Toledo’s City Council meets every other Tuesday at 4 p.m. at City Hall.

For More Information About Your Drinking Water

- U.S. Environmental Protection Agency’s Safe Drinking Water Hotline: 800-426-4791
- City of Toledo Web Site: www.toledo.oh.gov
- On-Line Water Report: www.toledo.oh.gov (then search for “drinking water quality report”)
- Toledo Water Plant/Questions about this Report: 419-936-3021
- Toledo City Council Meeting Information: 419-245-1050

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IMPORTANT INFORMATION ENCLOSED:
2009 WATER QUALITY REPORT

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