



THE CITY OF  
**TALLMADGE**  
HISTORY MOVING FORWARD

CITY OF TALLMADGE WATER & SEWER DEPARTMENT

# **DRINKING WATER QUALITY REPORT**

**2016**

**David G. Kline, Mayor**  
**The City of Tallmadge**



## SAFE WATER IS OUR PRIORITY

### **National Primary Drinking Water Regulation Compliance**

The City of Tallmadge has prepared the following report to provide information to you, the consumer, on the quality of our drinking water, provided by the City of Akron. Water provided by the Akron Public Utilities Bureau and the City of Tallmadge meets the current United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA) regulatory requirements by a wide margin.

### **Water Source**

Three impounding reservoirs take surface water from the Upper Cuyahoga River. Water is stored and released from Wendell R. LaDue Reservoir and East Branch Reservoir, both in Geauga County. These reservoirs supplement Lake Rockwell, located in Franklin Township, Portage County, 2.5 miles north of Kent, Ohio. Water from Lake Rockwell is treated at the nearby water supply plant, pumped 11 miles to Akron through three force mains into equalizing reservoirs and distributed to more than 95,000 households. Because 21 percent of the system is at higher elevations, eight districts are supplied by additional pump stations and tanks.

### **Source Water Contamination**

While the source water for the City of Akron Public Water System is considered susceptible to contamination, historically, the City of Akron Public Water System has effectively treated this source water to meet drinking water quality standards. Potential sources of contamination include agricultural runoff, failing on-site wastewater treatment systems (septic systems), municipal wastewater treatment discharges and non-point sources. In addition, the source water is susceptible to contamination through derailments, motor vehicle accidents or spills at sites where the corridor zone is crossed by roads and rail lines, or at fuel storage and vehicle service areas located adjacent to the corridor zone.

Please note that this assessment is based on data available and may not reflect current conditions. Water quality, land uses and other potential sources of contamination may change over time. For more information about the source water assessment program, go to [www.epa.ohio.gov/ddagw/swap.aspx](http://www.epa.ohio.gov/ddagw/swap.aspx). For further information regarding Akron's source water assessment, please write to Akron Water Supply at 1570 Ravenna Road, Kent, OH 44240-6111

### **Required Health Information**

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 animal or human activity.

#### **Contaminants that may be present in source water include:**

1. **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
2. **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.
3. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
4. **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.
5. **Radioactive contaminants**, which can be naturally occurring or the result of oil and gas production and mining activities.

# HOW TO READ THESE TABLES

This report is based upon tests conducted in the year 2016 by Akron Public Utilities Bureau, as well as the monthly bacteria and disinfection by-product samples for 2016, conducted by the City of Tallmadge. Terms used in the Water Quality Table and in other parts of this report are defined here.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Maximum Contaminant Level Goal (MCLG):** 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 Contaminant Level (MCL):** 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.

**Maximum Residual Disinfectant Level (MRDL):** The highest residual disinfectant level allowed.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of residual disinfectant below which there is no known or expected health risk.

**Detected Level:** The average level detected of a contaminant for comparison against the acceptance levels for each parameter. These levels could be the highest single measurement or an average of values, depending on the contaminant.

**Range:** The range of all values for samples tested for each contaminant.

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

## FUN FACTS

- All the earth's water is 97% oceans, 2% frozen and 1% suitable for drinking.
- Consumers can reduce their water bills by as much as 30% by using Water Sense labeled products and other water-efficient appliances.

## FUN FACTS

- Taking a bath requires up to 70 gallons of water. A five-minute shower uses only 10 to 25 gallons.
- A running toilet can waste up to 200 gallons of water per day.
- The average American family uses more than 300 gallons of water per day at home.

## Key to Tables

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

MRDL = Maximum Residual Disinfectant Level

MRDLG = Maximum Residual Disinfectant Level Goal

NTU = Nephelometric Turbidity Units

ppm = Parts per million, or milligrams per liter (mg/L)

ppb = Parts per billion, or micrograms per liter (µg/L)

TT = Treatment Technique

NA = Not Applicable

## Not Under Ohio EPA Regulation But of General Interest

	Average Detected Level	Range
Alkalinity	82 mg/L	51– 106 mg/L
Hardness (metric units)	117 mg/L	72– 152 mg/L
Hardness (English units)	7 grains per gallon	4 – 9 grains per gallon
pH	7.31 units	7.8 – 8.0 units
Sodium	44 mg/L	NA, one test is 2015
Total solids	245 mg/L	NA
Temperature (metric units)	14.6 °C	2.0 – 27.7 °C
Temperature (English units)	58°F	36– 32°F
Total Organic Carbon	2.88 mg/L	2.34 – 3.59 mg/L

# WATER QUALITY TABLE RESULTS 2016

## CITY OF AKRON PUBLIC WATER SYSTEM TEST RESULTS

	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants
<b>Bacteriological Contaminants</b>							
Turbidity (NTU)	N/A	TT	0.14	0.02-0.14	NO	2016	Soil Runoff
Turbidity (% meeting standard)	N/A	TT	100%	100% - 100%	NO	2016	Soil Runoff
Total Organic Carbon (compliance ratio)	N/A	TT	1.45	1.23-1.72	NO	2016	Naturally present in the environment
<b>Radioactive Contaminants</b>							
Alpha emitters (picocuries per liter)	0	15	3.6	NA	NO	2016	Erosion of natural deposits
Combined Radium-226/228 (picocuries per liter)	0	5 combined	2.0	NA	NO	2016	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.029	NA	NO	2016	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Chlorite (ppm), avg. of 3 samples in the distribution system	0.8	1.0	0.69	0.30-0.76	NO	2016	By-product of drinking water chlorination
Copper (ppm)	1.3	TT	0.015	<0.010-0.022	NO	2016	Corrosion of household plumbing systems
Fluoride (ppm)	4	4	1.00	0.76-1.19	NO	2016	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.50	0.02-0.50	NO	2016	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Volatile Organic Contaminants</b>							
Haloacetic Acids HAA5 (ppb)	No goal for the total	60	42.2	11.6-44.20	NO	2016	By-product of drinking water disinfection
Total Trihalomethanes TTHMs (ppb)	No goal for the tottl	80	69.2	28.6-96.5*	NO	2016	By-product of drinking water disinfection

\*The maximum Range of Detections is not a violation because individual samples are averaged with other samples before being compared with the maximum contaminant level.

<b>Residual Disinfectants</b>							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	.97	0.67-1.52	NO	2016	Water additive used to control microbes
Chlorine Dioxide (µg/l)	MRDLG = 800	MRDL = 800	340	10-340	NO	2016	Water additive used to control microbes

	Action Level	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical Source of Contaminants
<b>Lead and Copper</b>						
Copper (ppm), customers' taps	1.3 ppm	0.188	N/A	NO	2015	Zero out of 50 samples were found to have copper levels in excess of the copper Action Level of 1.3 ppm
Lead (ppb), routine compliance, at consumers' taps	15 ppb	27.7, 87.3	9.8	NO	2015	Corrosion of household plumbing systems. Erosion of natural deposits. 2 out of 50 samples were found to have lead levels in excess of the Action Level of 15 ppb
Lead (ppb), special non-routine samples, at consumers' taps	NA	20.7, 24.9, 28.4, 83.6	2.67	NO	2016	Corrosion of household plumbing systems. Erosion of natural deposits. 4 out of 125 lead special samples were found to have levels in excess of Action Level of 15 ppb

\*All homes with initial results above the lead Action Level were properly retested and confirmed to be less than the lead Action Level of 15 ppb

# WATER QUALITY TABLE RESULTS 2016

## CITY OF AKRON PUBLIC WATER SYSTEM TEST RESULTS

	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled
<b>Unregulated Contaminant Monitoring Rule 3</b>						
Chlorate (ppb), plant tap	NA	NA	318	20-517	NO	2013-2014
Chlorate (ppb), distribution system	NA	NA	537	420-854	NO	2013-2014
Chromium (total) (ppb), plant tap	NA	NA	0.24	0.20-0.29	NO	2013-2014
Chromium (total) (ppb), distribution system	NA	NA	0.29	0.20-0.35	NO	2013-2014
Chromium-6 (ppb), plant tap	NA	NA	0.046	0.034-0.056	NO	2013-2014
Chromium-6 (ppb), distribution system	NA	NA	0.088	0.056-0.13	NO	2013-2014
Strontium (ppb), plant tap	NA	NA	80.8	70.0-96.3	NO	2013-2014
Strontium (ppb), distribution system	NA	NA	80.9	66.4-99.4	NO	2013-2014
Vanadium (ppb), plant tap	NA	NA	0.88	0.20-1.6	NO	2013-2014
Vanadium (ppb), distributions system	NA	NA	0.88	0.20-1.8	NO	2013-2014

### About Unregulated Contaminant Monitoring Rule 3

Our utility is committed to protecting public health and meets or surpasses all state and federal health standards for tap water. To help advance the science of drinking water, the rule was enacted January, 2013 and we collected data for the EPA in 2013 and 2014. Collecting information about the occurrence of these compounds in water supplies is the first step in the EPA's efforts to determine whether they should be regulated. The presence of a compound does not necessarily equate to a health risk; the concentration of a compound is a far more important factor in determining whether there are health implications. We will closely monitor both the concentrations of these compounds and the EPA's health studies and will keep you informed of any developments. Should the EPA ultimately determine that regulation is warranted, we will take whatever steps are necessary to protect the health of our customers.

## CITY OF TALLMADGE PUBLIC WATER SYSTEM TEST RESULTS

	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants
<b>Volatile Organic Chemicals</b>							
Haloacetic Acids HAA5 (ppb)	0	60 running annual avg.	51.98	20.90 - 107.60	NO	2016	By-product of drinking water disinfection
Total Trihalomethanes TTHMs (ppb)	0	80 running annual avg.	60.14	9.68 - 88.4	NO	2016	By-product of drinking water disinfection
<b>Residual Disinfectants</b>							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4.0	0.97	0.2 - 4.0	NO	2016	Water additive used to control microbes.

	Action Level	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical Source of Contaminants
<b>Lead and Copper</b>						
Copper (ppm), customers' taps	1.3 ppm	0	.1340	NO	2014	Corrosion of household plumbing systems. Erosion of natural deposits
Zero out of 50 samples were found to have copper levels in excess of the copper Action Level of 1.3 ppm						
Lead (ppb), routine compliance, at consumers' taps	15 ppb	0	0	NO	2014	Corrosion of household plumbing systems. Erosion of natural deposits.
Zero out of 50 samples were found to have lead levels in excess of the Action Level of 15 ppb						

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 Tallmadge 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 <http://www.epa.gov/safewater/lead>.

The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percent 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 (1) indicates a violation of the TOC removal requirements.



## KNOW YOUR WATER

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limits 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 (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).

### **How do I participate in decisions concerning my drinking water:**

Public participation and comments are encouraged at committee meetings of the City Council, which meets the 2<sup>nd</sup> and 4<sup>th</sup> Thursdays of each month at 7:00 pm in Council Chambers, 46 North Avenue and on our website at [tallmadge-ohio.org](http://tallmadge-ohio.org)

## **THREE REASONS YOU CAN COUNT ON THE AKRON WATER SUPPLY BUREAU FOR FRESH, CLEAN WATER**

# 1

### **Watershed Protection**

Our experts routinely inspect the water source to help ensure the water supply is clean and safe.

# 2

### **Water Treatment**

Our certified operating professionals provide an ample supply of high-quality drinking water while striving to exceed all regulatory requirements.

# 3

### **24/7 System Maintenance**

A skilled team is available days, nights, weekends and holidays to maintain the water mains and reservoirs so you have water when you need it.