



City of Tallmadge Utilities Bureau

Annual Drinking Water Quality Report for 2009

This report is provided to you, the consumer, on the quality of our drinking water. Included is an explanation of where our water comes from, general health information, water quality test results, as well as tips on how to interpret the data.

We're proud to share the results with you. Please read them carefully.

Water Source

Surface water is taken from the Upper Cuyahoga River via three impounding reservoirs: Wendell R. LaDue and East branch, both located in Geauga County. These reservoirs supplement Lake Rockwell, located in Franklin Township, Portage County, 2.5 miles north of Kent, Ohio. Akron's water is taken from Lake Rockwell, treated at the nearby water supply plant, then pumped 11 miles to Akron, through three force mains to equalizing reservoirs. Tallmadge has the water pumped through two force mains to our pump station at 29 Northeast Avenue, and then distributed to over 7,000 customers.

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:

- 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, urban storm water runoff, and residential uses;
- 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;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities
- 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.

Additional Required Health Information

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 Monday prior to the 2nd and 4th Thursday of each month, as posted in the Tallmadge Express or on the worldwide web at www.tallmadge-ohio.org.

How to Read These Tables

This report is based upon tests conducted in the year 2009 by Akron Public Utilities Bureau, as well as the monthly bacteria and disinfection by-product samples for 2009, conducted by the City of Tallmadge. Terms used in the Water Quality Table and in other parts of this report are defined here.

Definitions of terms contained within this report:

Maximum Contaminant Level or 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 Contaminant Level Goal or 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.

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

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 health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

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

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

Detected Level: The average level detected of these levels could be the highest single level average of values depending on the contaminant.

Parts Per Million (ppm): units of measure for disinfectant level allowed concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days

Parts per Billion (ppb): units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years

Not Under Ohio EPA Regulation But of General Interest

	Average Detected Level	Range
Alkalinity	83 mg/L	40 – 113 mg/L
Hardness (metric units)	121 mg/L	54 – 162 mg/L
Hardness (English units)	7 grains per gallon	3 – 9 grains per gallon
pH	7.31 units	6.99 – 7.96 units
Sodium	42.7 mg/L	NA
Total solids	186 mg/L	NA
Temperature (metric units)	13 °C	1 – 26 °C
Temperature (English units)	56 °F	35 – 79 °F
Total Organic Carbon	2.84 mg/L	2.23 – 3.48 mg/L

For more information, call City of Tallmadge Water/Sewer Department at (330) 633-0851. This report is also available on the World Wide Web at www.tallmadge-ohio.org

PWS #OH7704703

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2009 Water Quality Table

Year Sampled	MCLG	MCL	Level Found	Range of Detections	Violation	Typical Source of Contaminants
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Inorganic Contaminants:

Barium	2009	2	2	0.041	NA	NO	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Chlorite (ppm), avg of 3 samples in the distribution system	2009	0.8	1.0	0.627	0.382 – 0.770	NO	By-product of drinking water chlorination
Copper (ppm)	2008	1.3	Action Level 1.3	.148 90 th %	.5 to 2.44	NO	Corrosion of household plumbing systems
Zero out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm							
Fluoride	2009	4	4	1.00	0.70 – 1.22	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	2008	0	Action Level 1.3	Less than 5.0	NA	NO	Corrosion of household plumbing systems
Zero out of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb							
Nitrate (ppm)	2009	10	10	0.88	0.03 – 0.88	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

**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>.

Microbiological Contaminants

Total Organic Carbon (compliance ratio)	2009	N/A	TT	1.512	1.260 - 1.633	NO	Naturally present in the environment
Turbidity (NTU)	2009	N/A	TT	0.483	0.009 - 0.483	NO	Soil Runoff
Turbidity (% meeting standard)	20089	N/A	TT	99.9%	99.9% -100%	NO	

Volatile Organic Chemicals (Stage 1 – tested by Tallmadge)

HAA5 (ppb)	2009	0	60 running annual avg.	51.98	20.90 – 107.60	NO	By-product of drinking water disinfection
TTHM (ppb)	2009	0	80 running annual avg.	60.14	9.68 – 88.4	NO	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. All water system averages were below the Ohio EPA's limits for these averages.

Residual Disinfectants

Total Chlorine (ppm)	2009	MRDLG= 4	MRDL= 4	1.45	1.00 to 1.57	NO	Water additive used to control microbes
Chlorine Dioxide (ug/l)	2009	MRDLG= 800	MRDL= 800	380	0 to 380	NO	Water additive used to control microbes

Unregulated Contaminants

Bromodichloromethane (ppb)	2009	N/A	N/A	5.2	NA	NO	By-product of drinking water chlorination
Chloroform (ppb)	2009	N/A	N/A	7.8	NA	NO	By-product of drinking water chlorination
Dibromochloromethane (ppb)	2009	N/A	N/A	1.4	NA	NO	By-product of drinking water chlorination

Radioactive Contaminants

Alpha emitters (picocuries per liter)	2004	0	15	1.4	NA	NO	Erosion of natural deposits
Beta/photon emitters (picocuries per liter)	2004	0	Action Level=50	3.8	N/A	NO	Decay of natural and man-made Deposits

