



City of Tallmadge Utilities Bureau

Annual Drinking Water Quality Report for 2006

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 **Request Additional Health Information***

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.

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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

"Aesthetic Qualities" In January to mid-February of 2006 many customers detected a musty taste and odor in their water. This event was traced to an increase of trace amounts of MIB in the water. MIB is a readily detectable chemical that is produced by algae and other natural organisms in the environment. The Akron Public Utilities Bureau used the best known treatment techniques to reduce the problem to our customers. Since that event the water system has increased our monitoring for taste and odor causing algae and their byproducts and is prepared to treat this problem should it occur again.

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 2006 by Akron Public Utilities Bureau, as well as the monthly bacteria and disinfection by-product samples for 2006, 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

Contaminant	Detected Level	Range
Alkalinity	74 mg/L	51 – 99 mg/L
Hardness (metric units)	109 mg/L	66 – 152 mg/L
Hardness English units)	6.4 grains per gallon	3.9 to 8.9 grains per gallon
pH	7.32 units	7.00– 8.71 units
Orthophosphate	1.044 mg/L	0.496 – 2.070 mg/L
Total Organic Carbon	2.76 mg/L	1.68 – 4.25 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

Water Quality Table

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Source	Violation	
Inorganic Contaminants:									
Barium	2006		2	n/a	0.0309	n/a	Discharge of drilling wastes, Discharge from metal refineries, Erosion of natural deposits	NO	
Chlorite	2006	ppm	1.0	0.8	0.867	0.128-0.867		By-product of dinking water Chlorination	NO
Fluoride	2006	ppm	4	4	1.01	0.77-1.27	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	NO	
Nitrate	2006	ppm	10	10	0.84	0.50-0.84	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	NO	
Microbiological Contaminants									
Turbidity	2006	NTU	TT	n/a	0.149	0.039-0.149	Soil runoff	NO	
*Nephelometric Turbidity Units or turbidity is a measure of the cloudiness of the water. Akron monitors it because it is a good indicator of the effectiveness of the filtration system.									
Turbidity (% meeting standard)	2006		n/a	TT	n/a	100%	100%	Soil runoff	NO
Volatile Organic Chemicals (tested by Tallmadge)									
HAA5 (Five Haloacetic Acids)	2006	ppb	60	n/a	40.1	16-68	By-product of drinking water disinfection	NO	
TTHMs (Total Trihalomethanes)	2006	ppb	80	n/a	53	25-108.2	By-product of drinking water disinfection	NO	
Unregulated Contaminants									
Bromodichloromethane	2006	ppb	n/a	n/a	9.5	4.5 – 9.5	By-product of drinking water disinfection	NO	
Chloroform	2006	ppb	n/a	n/a	24	5.5 – 24	By-product of drinking water disinfection	NO	
Dibromochloromethane	2006	ppb	n/a	n/a	1.6	1.5 – 1.6	By-product of drinking water disinfection	NO	
Residual Disinfectants									
Total Chlorine	2006	ppm	MRDL= 4	MRDLG= 4	1.37	1.32 – 1.37	By-product of drinking water disinfection	NO	
Chlorine Dioxide	2006	ppm	MRDL= 4	MRDLG= 4	0.31	0.02 – 0.31	Water additive used to control microbes	NO	
Synthetic Organic Contaminants including Pesticides and Herbicides									
Atrazine	2006	ppb	3	3	0.37	less than 0.3 To 0.37	Runoff from herbicide used on row crops	NO	
Radioactive Contaminants									
Alpha emitters (picocuries per liter)	2004	n/a	15	0	1.4	n/a	Erosion of natural deposits	NO	
Beta/photon emitters (picocuries per liter)	2004	n/a	Action level = 50	0	3.8	n/a	Decay of natural & man-made deposits	NO	