

THREE REASONS YOU CAN COUNT ON THE AKRON PUBLIC UTILITIES BUREAU FOR FRESH, CLEAN WATER

1 Watershed Rangers – our experts routinely inspect the water source to help ensure the water supply is clean and safe for you to use.

2 Hydrant Flushing – this helps clean the water pipe system, keeps valves working properly and ensures hydrants will function properly in the event of a fire.

3 24/7 Repairs – a skilled team is available days, nights, weekends and holidays to fix water main breaks so you have water when you need it.



AKRON
PUBLIC UTILITIES BUREAU
Your Clean Water Resource.

THE CITY OF AKRON
PUBLIC UTILITIES BUREAU
P.O. Box 3665
Akron, Ohio 44309-3665



AKRON PUBLIC UTILITIES BUREAU DRINKING WATER QUALITY REPORT APRIL 2010

DONALD L. PLUSQUELLIC, MAYOR, THE CITY OF AKRON



YOUR WATER, PROVIDED BY THE AKRON PUBLIC UTILITIES BUREAU, MET ALL OHIO EPA STANDARDS

National Primary Drinking Water Regulation Compliance

Water provided by the Akron Public Utilities Bureau meets the current USEPA and OEPA regulatory requirements by a wide margin. The City of Akron Public Water System met all regulations for treating, testing and reporting the quality of its drinking water in 2009.

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 80,000 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. For further information regarding Akron's source water assessment, please write to Akron Water Supply at 1570 Ravenna Road, Kent, Ohio 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 stormwater 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 stormwater runoff and residential uses;
4. 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, urban stormwater runoff and septic systems; and
5. 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, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which shall 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 may be obtained by calling the Federal Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 infections. These people should seek advice about drinking water from their health care providers. USEPA/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 (800-426-4791).



HOW TO READ THE FOLLOWING TABLES

This report is based on tests conducted in 2009 by the Akron Public Utilities Bureau. 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.

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

Contaminants	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



The EPA requires regular sampling to ensure drinking water safety. The Akron Public Utilities Bureau conducted sampling for bacteria and inorganic and volatile organic contaminants in 2009. Samples were collected for 122 different contaminants, most of which were not detected in the Akron water supply. Akron tap water met all EPA drinking water regulations. The EPA approves the City of Akron to operate a public water system under license # 7700011-735324-2010. We have a current, unconditioned license to operate our water system.

Listed below is information on those contaminants detected.

The complete listing of all tests performed on Akron drinking water is available at www.akronohio.gov/pubutil/pdf/2009allwatertests.pdf or by calling 330.678.0077.

WATER QUALITY TABLE FOR 2009

	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants
Microbiological Contaminants							
Turbidity (NTU)	NA	TT	0.483	0.009 – 0.483	NO	2009	Soil runoff
Turbidity (% meeting standard)	NA	TT	99.9%	99.9% – 100%	NO	2009	
Total Organic Carbon (compliance ratio)	NA	TT	1.512	1.260 – 1.633	NO	2009	Naturally present in the environment
Inorganic Contaminants							
Barium (ppm)	2	2	0.041	NA	NO	2009	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	0.627	0.382 to 0.770	NO	2009	Byproduct of drinking water chlorination
Copper (ppm)	1.3	Action Level = 1.3	0.140	NA	NO	2009	Corrosion of household plumbing systems
Zero out of 50 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.							
Fluoride (ppm)	4	4	1.00	0.70 – 1.22	NO	2009	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	0	Action Level = 15	2.4	NA	NO	2009	Corrosion of household plumbing systems
Zero out of 50 samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Nitrate (ppm)	10	10	0.88	0.03 – 0.88	NO	2009	Runoff from fertilizer use; Leaching from septic tanks/sewage; Erosion of natural deposits
Residual Disinfectants							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.45	1.00 – 1.57	NO	2009	Water additive used to control microbes
Chlorine Dioxide (ppb)	MRDLG = 800	MRDL = 800	380	0 – 380	NO	2009	Water additive used to control microbes
Volatile Organic Chemicals (Stage I)							
Haloacetic Acids HAA5 (ppb)	0	60	49.6	23.7 – 74.1*	NO	2009	Byproduct of drinking water chlorination
Total Trihalomethanes TTHMs (ppb)	0	80	52.6	10.9 – 106.3*	NO	2009	Byproduct of drinking water chlorination

* 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.

Radioactive Contaminants							
Alpha emitters (picocuries per liter)	0	15	1.4	NA	NO	2004	Erosion of natural deposits
Beta/photon emitters (picocuries per liter)	0	Action Level = 50	3.8	NA	NO	2004	Decay of natural and man-made deposits
Unregulated Contaminants, Stage I							
Bromodichloromethane (ppb)	NA	NA	5.2	NA	NO	2009	Byproduct of drinking water chlorination
Chloroform (ppb)	NA	NA	7.8	NA	NO	2009	Byproduct of drinking water chlorination
Dibromochloromethane (ppb)	NA	NA	1.4	NA	NO	2009	Byproduct of drinking water chlorination

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 Akron Public Utilities Bureau 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 website at <http://www.epa.gov/safewater/lead>.

We are required to monitor your drinking water for specific parameters on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

On May 17, 2009, between 6:30 am and 2:30 pm, we had an equipment failure at our remote monitoring station in Kent. Free chlorine residual was not continuously monitored at the station during this time frame, and we failed to collect a grab sample every four hours during the time the equipment was out of order. However, the backup free chlorine monitor at the water plant continued to function during this time period and showed adequate free chlorine levels leaving the water plant (reference EPA letter of June 1, 2009).

On August 21, 2009, between 1:52 am and 8:10 am, we had an equipment failure at our remote monitoring station in Kent. Free chlorine residual was not continuously monitored at the station during this time frame, and we failed to collect a grab sample every four hours during the time the equipment was out of order. However, the backup free chlorine monitor at the water plant continued to function during this time period and showed adequate free chlorine levels leaving the water plant (reference EPA letter of August 27, 2009).

Upon being notified of these violations, the water supplier was required to have the drinking water analyzed for the above mentioned parameters. The water supplier will take steps to ensure that adequate monitoring will be performed in the future.