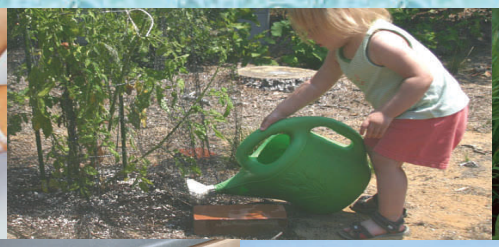
City of Waconia




The City of Waconia takes pride in providing a high level of water quality and customer service and in having one of the most qualified, experienced and dedicated water plant staffs in Minnesota. Waconia hires only State certified operators and the staff receives extensive training in operations and measurement of water quality.

Inside This Report:

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EPA Safe Drinking Water Hotline
1-800-426-4791
Minnesota Department of Health
651-201-4700

The Truth about Tap

Beliefs — Surveys have found that most consumers who drink bottled water do so because they enjoy its taste or its portable convenience. Others drink bottled water because they believe it to be more pure or safer than their tap water.

The Truth — Did you know that the average bottle of water can cost up to 1,000 times more than tap water? Despite what its higher cost would lead us to believe, estimates are that 25- 40% of the bottled water on the market is simply repackaged tap water. Tap water is regulated by the Environmental Protection Agency (EPA) under the Safe Drinking Water Act, while bottled water is considered a food and is thus regulated by the Food and Drug Administration (FDA). Though some bottlers may voluntarily exceed FDA standards, those standards are less stringent than the EPA standards for tap water. For more information, visit www.DrinkTap.org

Please conserve water inside and outside of your home.
Make wise water use part of your lifestyle.
www.wateruseitwisely.com

Consumer Confidence Report 2008

Substances detected in Waconia's water in 2008

No substances were detected at levels that violated federal drinking water standards. However, some substances were detected in trace amounts that were below legal limits. The table that follows shows the substances that were detected in trace amounts last year. Some substances are sampled less frequently than once a year; as a result not all substances were sampled for in 2008. If any of these substances were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.

Regulated substances controlled prior to distribution

Substance (units)	MCLG	MCL	Level Found Range (2008)	Level Found Average /Result*	Typical Source
Alpha Emitters (pCi/l) (01/10/2005)	0	15.4	N/A	8.3	Erosion of natural deposits.
Arsenic (ppb) (01/31/2005)	0	10.0	N/A	1.27	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm) (01/31/2005)	2.0	2.0	N/A	0.42	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Combined Radium (pCi/l) (01/10/2005)	0	5.4	N/A	4.1	Erosion of natural deposits.
Fluoride (ppm)	4.0	4.0	.88-1.2	1.18	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Haloacetic Acids (HAA5) (ppb)	0	60.0	N/A	3.1	By-product of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	10.0	10.0	ND-.58	.58	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomethanes) (ppb)	0	80.0	N/A	5.6	By-product of drinking water disinfection.

Substance (units)	Level Found Range (2008)	Level Found Average/Result*	Typical Source
Radon (pCi/l) (04/19/2004)	N/A	36.0	Erosion of natural deposits.

Radon is a radioactive gas which is naturally occurring in some groundwater. It poses a lung cancer risk when gas is released from water into air (as occurs during showering, bathing, or washing dishes or clothes) and a stomach cancer risk when it is ingested. Because radon in indoor air poses a much greater health risk than radon in drinking water, an Alternative Maximum Substance Level (AMCL) of 4,000 picoCuries per liter may apply in states that have adopted an Indoor Air Program, which compels citizens, homeowners, schools, and communities to reduce the radon threat from indoor air. For states without such a program, the Maximum Substance Level (MCL) of 300 pCi/l may apply. Minnesota plans to adopt an Indoor Air Program once the Radon Rule is finalized.

Substance (units)	MRDLG	MRDL	****	*****	Typical Source
Chlorine (ppm)	4	4	.1-.9	.77	Water additive used to control microbes.

KEY TO CHART

MCLG: Maximum contaminant level goal. The concentration of a substance in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. **MCL:** Maximum contaminant level. The highest level allowed in drinking water. **MCLs** are set as close to the MCLGs as feasible using the best available treatment technology. **MRDL:** Maximum Residual Disinfectant Level. **MRDLG:** Maximum Residual Disinfectant Level Goal. **AL:** Action Level. The concentration of a substance which, if exceeded, triggers treatment methods or other requirements that the utility must follow. **PPB:** Parts per billion. **PPM:** Parts per million. **PCi/l:** PicoCuries per liter (a measure of radioactivity). **ND:** Not detected at testing limits. **90th Percentile:** Level: This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. (For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples) Note: In situations in which only 5 samples are taken, the average o f the two with the highest levels is taken to determine the 90th percentile level. **N/A:** Not applicable (Does not apply).

**This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.*

*****Highest and lowest monthly average *****Highest quarterly average*






Regulated substances controlled at the consumer's tap

Substance (units)	MCLG	AL	90% Level	# sites over AL	Typical Source
Lead (ppb)	N/A	15	9	3 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper (ppm)	N/A	1.3	1.27	3 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.

If present, infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Waconia 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 or at www.epa.gov/safewater/lead.

Unregulated substances**

Substance (units)	Level Found Range (2008)	Level Found Average/Result	Typical Source
Sulfate (ppm) (1/12/2007)	N/A	53.6	Erosion of natural deposits.
Sodium (ppm) (1/12/2007)	N/A	32	Erosion of natural deposits.

***Some substances do not have maximum substance levels MCL established for them. These "unregulated substances" are assessed using state standards known as health risk limits to determine if they pose a threat to human health. If unacceptable levels of an unregulated substance are found, the response is the same as if an MCL has been exceeded; the water utility must inform its customers and take corrective actions*

Special notice for vulnerable persons

Some people may be more vulnerable to substances found 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 infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

Compliance with National Primary Drinking Water Regulations

The sources of drinking water (both tap 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.

Substances that may be present in source water include:

- ***Microbial substances**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.*
- ***Inorganic substances**, 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 substances**, 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 substances**, 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, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain substances in water provided by public water systems. Food & Drug Administration regulations establish limits for substances in bottled water which must provide the same protection for public health.

Drinking water, including bottle water, may reasonably be expected to contain at least small amounts of some substances. The presence of substances does not necessarily indicate that water poses a health risk. More information about substances and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Making your high quality water even better

Waconia water plant staff are continually testing the City's drinking water to ensure its safety, purity, and taste. Each month, separate sites in the water distribution system are tested for coliform bacteria, iron, chlorine and fluoride levels. The State Health Department also conducts testing of Waconia's drinking water for the substances listed in this report.

The City of Waconia is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2008. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

Sources of water

The City of Waconia provides drinking water to its residents from a groundwater source: four wells ranging from 253 to 735 feet deep, that draw water from the Quaternary Buried Artesian and Mt. Simon aquifers. There are a number of advantages to an underground water supply. Communities with underground wells are able to avoid the Cryptosporidium and Giardi micro-organisms, which can contaminate surface water supplies and cause intestinal disorders.

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has also made a determination as to how vulnerable the source of water may be to future contamination incidents. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-201-4700 or 1-800-818-9318 (and press 5) during normal business hours. Also, you can view it online at www.health.state.mn.us/divs/eh/water/swp/swa.

Water treatment process

The water flows into an aerator where gases are removed, iron is oxidized, and oxygen is added. Fluoride is added under State law to prevent tooth decay and chlorine is added to kill any bacteria. It takes less than on drop of chlorine per gallon of water to kill bacteria. Polyphosphate for lead and copper corrosion control is also added. The water then flows through sand filters where the last of the impurities are removed.

Once the water has been treated, it is stored in the clearwell. From there, water is pumped directly to residents and as much as 2,325,000 gallons can be stored in the City's three water towers for peak period usage.

Enhancements to our existing water system

In addition to the new water tower, the City is making improvements to the existing water plant. The new plant upgrade will add 1960gpm of capacity for a total of nearly 3400gpm of treatment from this location. The treatment plant process will match the existing facility process, removing iron and manganese, in addition, it will include fluoride, chlorine and orthophosphate to further protect and enhance public health.

For more information about Waconia's drinking water or for information about opportunities for public participation in decisions that may affect the quality of water, please contact the Public Utilities Department at 952-442-2615.