We're on the Web..
www.waconia.org

City of Waconia
Public Works Department
1250 S Highway 284
Waconia, MN 55387
952-442-2615

….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 infections. 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 are available from the Safe Drinking Water Hotline at 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.

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, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food & Drug Administration regulations establish limits for contaminants 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 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 at 800-426-4791.

City of Waconia 2004 Drinking Water Report

A short course on where our water comes from, its content, and how it is processed from the well to your home!

A 2004 REQUIREMENT OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY

2004 Water Quality Report

Introduction:

The City of Waconia is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2004. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

Source 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 the Mt. Simon aquifers.

The water provided to customers may meet drinking water standards but the Minnesota Department of Health has determined that one or more of the sources of water is potentially susceptible to contamination. If you wish to obtain the entire source water assessment regarding your dinking water, please call 651-215-0800 or 1-800-818-9318 (and press 5) during normal business hours. You can also view it on-line at www.health.state.mn.us/divs/eh/water/swp/swa.

Call Public Works at 952-442-2615 if you have questions about the City of Waconia drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

Water Testing:

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, chlorine and fluoride levels.

The State Health Department also conducts testing of Waconia's drinking water for the contaminants listed in this report.

Quality On Tap!
Our Commitment. Our Profession.

City of Waconia
Water Utilities Department
1250 South Highway 284
Waconia, MN 55387
952-442-2615

Waconia's Water Tower

Where Waconia Water Comes From and How it is Treated Before it gets to Your Home....

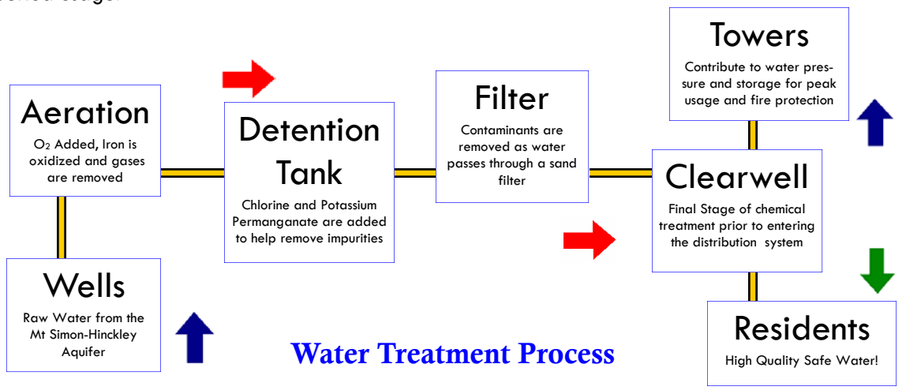
Below the Ground

Waconia's water comes from underground wells. 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.

Water Treatment

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 one 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 City's 650,000 gallon clearwell. From there, water is pumped directly to residents and as much as 325,000 gallons can be stored in the City's two water towers for peak period usage.



Water Treatment Process

Customer Service

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.

FOR MORE INFORMATION ABOUT THE WACONIA WATER SYSTEM OR YOUR WACONIA DRINKING WATER, PLEASE CONTACT THE WATER DEPARTMENT AT 952-442-2615

Results of Monitoring:

The results contained in the following table indicate an exceedance of a federal standard. Some other contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants that were detected in trace amounts last year. (Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2004. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.)

Key to abbreviations:

MCLG—Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL—Maximum Contaminant Level: 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.

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

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 5 samples were taken, the average of the two with the highest levels is taken to determine the 90th percentile level.

pCi/l—PicoCuries per liter (a measure of radioactivity).

ppb—Parts per billion, which can also be expressed as micrograms per liter (ug/l).

ppm—Parts per million, which can be expressed as milligrams per liter (mg/l).

nd—No Detection.

N/A—Not applicable (does not apply).

Contaminant (units)	MCLG	MCL	Level Found Range (2004)	Level Found Average /Result*	Typical Source of Contaminant
Alpha Emitters (pCi/l)	0	15.4	.9-7.8	5.6	Erosion of natural deposits.
Arsenic (ppb) (02/26/2003)	0	50	N/A	1.31	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Combined Radium (pCi/l)	0	5.4	.28-3.7	2.54	Erosion of natural deposits.
Ethylbenzene (ppb)	700.0	700.0	Nd-0.2	0.1	Discharge from petroleum refineries.
Fluoride (ppm)	4	4	1-1.2	1.2	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) (08/19/2003)	0	60	N/A	4.2	By-product of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	10	10	.81-1.2	1.2	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomethanes) (ppb) (08/19/2003)	0	80	N/A	6.7	By-product of drinking water disinfection.
Xylenes (ppm)	10	10	nd-.0007	0	Discharge from petroleum factories; Discharge from chemical factories.

Contaminant (units)	Level Found Range (2003)	Level Found Average/Result*	Typical Source of Contaminant
Radon (pCi/l)	12-36	35	Erosion of natural deposits.

* 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.

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 Contaminant 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 Contaminant Level (MCL) of 300 pCi/l may apply. Minnesota plans to adopt an Indoor Air Program once the Radon Rule is finalized.

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	nd-.9	.42	Water additive used to control microbes.

**** Highest and Lowest Monthly Average
***** Highest Quarterly Average

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Lead (ppb)	N/A	15	8	1 out of 20	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper (ppm)	N/A	1.3	1.39 ★	3 out of 20	Corrosion of household plumbing systems; Erosion of natural deposits.

★ We are in exceedance of the action level for copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level, over a relatively short amount of time, could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. In response to this issue, we performed a corrosion control study to make the water less likely to absorb materials such as copper from your plumbing.

Some contaminants do not have Maximum Contaminant Levels established for them. These "unregulated contaminants" 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 contaminant are found, the response is the same as if an MCL has been exceeded; the water system must inform its customers and take other corrective actions. The following table lists the unregulated contaminants that were detected:

Contaminant (units)	Level Found Range (2004)	Level Found Average/Result	Typical Source of Contaminant
Sodium (ppm) (02/26/2003)	N/A	25.0	Erosion of natural deposits.
Sulfate (ppm) (02/26/2003)	N/A	23.0	Erosion of natural deposits.