



“... meeting community needs ... enhancing quality of life”

## 2007 Annual Water Quality Report to our Community

Appleton’s drinking water originates from Lake Winnebago. This water source undergoes a rigorous series of treatment steps before it reaches your faucet. The Appleton Water Treatment Facility uses processes that include lime softening, granular activated carbon, membrane filtration, disinfection, and fluoridation to produce a reliable high quality water supply for our community. This report contains a summary of results for the laboratory testing conducted on your drinking water over the past year. For questions about this report please contact Michael Buettner at 920-997-4200.



In 2003 the Wisconsin Department of Natural Resources completed an assessment on Lake Winnebago as our sole drinking water source. Lake Winnebago source water was determined to normally be of good quality, but regularly degraded as a result of various events such as heavy precipitation, wind and seasonal climate change. These events cause contaminants associated with human activities such as agriculture, industry and waste management to drain into the watersheds entering Lake Winnebago. The Appleton Water Treatment Plant processes are designed specifically to deal with these contaminants in the source water and to produce a continuously safe drinking water for our customers. These processes include lime softening, granular activated carbon adsorption, and membrane filtration.

For more information on impacts to your source of drinking water see the “Source Water Assessment for Appleton Waterworks” available at the Appleton Public Library or visit [www.dnr.state.wi.us/org/water/dwg/SWAP/index.htm](http://www.dnr.state.wi.us/org/water/dwg/SWAP/index.htm) for the Wisconsin DNR Source Water Assessment Program website on the internet.

### FREQUENTLY ASKED QUESTIONS



#### **WHY DOES TAP WATER APPEAR CLOUDY IN A GLASS, THEN IT CLEARS UP?**

Cloudiness in water that disappears in a few minutes is dissolved air in the water. When cold water from the water main enters a warm building, the air escaping the water makes the water look cloudy or milky. The cloudiness usually occurs more often in the winter than in the summer because cold water can hold more dissolved air than warm water.

#### **WHICH IS BETTER - BOTTLED WATER OR TAP WATER?**

Appleton drinking water meets all of the federal and state drinking water standards, and is safe for your use right from the tap. Choosing between tap and bottled water is a matter of personal preference. Compared to the price of bottled water, your tap water is a bargain at less than 1 cent per gallon.

#### **DO I NEED A WATER SOFTENER OR FILTER TO MAKE MY TAP WATER BETTER?**

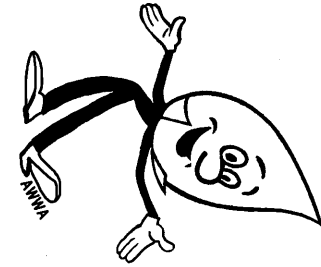
No, water softening or additional filtration are not needed. Our water is lime softened to the right hardness level (about 5 grains) for your taste and compatibility with your home plumbing system. The water is already filtered through ultra-filter membranes with pores so small they can only be seen under a microscope.

#### **WHY DOES THE CITY OF APPLETON FLUSH HYDRANTS?**

The Public Works Department conducts semi annual flushing of the water system to remove the natural minerals, like iron, which are harmless but which can discolor your water. We do this by turning on fire hydrants systematically to move large volumes of water through the water mains. Moving large volumes of water through the water main will remove the sediment that over time builds up inside the walls of the main.

If you see our crews working in your area, please try to use as little, or if possible, no water for an hour. Allowing the water to settle ensures that you won’t draw discoloration into your water system.

Should you find discoloration in your system, stop using the water, wait about an hour, and then draw off the discolored water **through a cold-water tap only**.



**POSTAL PATRON**

**DEPARTMENT OF UTILITIES**  
WATER TREATMENT FACILITY  
2281 Manitowoc Road • Menasha, WI 54952-8924  
920/997-4200 • FAX 920/997-3240

**IMPORTANT INFORMATION WE ARE  
REQUIRED TO PROVIDE OUR CUSTOMERS**

**CARRIER ROUTE  
PRE-SORT W/S**

**PRSRST STD  
U.S. POSTAGE  
PAID  
APPLETON, WI  
PERMIT NO. 11**

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The following table lists the contaminants the Wisconsin Department of Natural Resources (WDNR) required the Appleton Water Treatment Facility to test in 2007. **There were NO contaminant level violations in the water provided to you by the Appleton Water Treatment Facility in 2007.**

#### Microbiological Contaminants

Contaminant	MCL	MCLG	Level Found	Range	Typical Source
Coliform Bacteria (80 samples/month)	1	1	0	0	Surface water runoff; feed lots; sanitary sewage

#### Disinfection Byproducts (DBPs)

Total Haloacetic Acid (HAAs) (ppb)	60	60	15 (average)	11-18	By-Product of drinking water chlorination. HAAs are a total of five chlorinated byproducts.
Bromodichloromethane (ppb)	N/A	N/A	4.83 (average)	4.20-5.30	By-Product of drinking water chlorination. Regulated as TTHMs
Chloroform (ppb)	N/A	N/A	23.50 (average)	20.00-26.00	By-Product of drinking water chlorination. Regulated as TTHMs
Dibromochloromethane (ppb)	N/A	N/A	0.47 (average)	0.24-0.60	By-Product of drinking water chlorination. Regulated as TTHMs
Total Trihalomethanes (TTHMs) (ppb)	80	0	29.00 (average)	24.4-31.5	By-Product of drinking water chlorination. TTHMs are a total of four chlorinated byproducts.

#### Inorganic Contaminants

Arsenic (ppb)	10.0	N/A	1.2	1.2	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Chromium (ppb)	100	100	ND	ND	Discharge from steel and pulp mills; Erosion of natural deposits
Copper (ppm)	AL=1.3 (90%)	1.3	0.085 (90%)	ND-0.120	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	MCL=4 SMCL=2	4	1.0 (average)	0.8-1.10	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	AL=15 (90%)	0	3.8 (90%)	ND-4.90	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (NO <sub>3</sub> -N) (ppm)	10	10	0.28	0.28	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	N/A	N/A	15	15	N/A
Sulfate (ppm)	SMCL = 250	N/A	32	32	N/A

#### Definition of Terms

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. AL of 90% is the 90 <sup>th</sup> percentile value of all testing results.
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.
MCLG	Maximum Contaminant Level Goal: 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.
N/A	Non-Applicable
ND	Non-detectable
ppm	Parts per million, or milligrams per liter (mg/l)
ppb	Parts per billion, or micrograms per liter (ug/l)
SMCL	Secondary Maximum Contaminant Level: Inorganic chemicals that are not hazardous to health but may be objectionable to an appreciable number of persons.

#### INFORMATION

##### REPORT A WATER MAIN BREAK

If you see water where you usually wouldn't expect, it may be from a water main break. Call Municipal Services at (920) 832-5580 or Mac Tel (920) 730-3004.

##### MOVING IN / MOVING OUT

Call City of Appleton Finance Department at (920) 832-6442 to set-up an account or get a final water reading.

##### MORE ABOUT YOUR WATER

For more information on your drinking water visit [www.appleton.org/departments/utilities/water](http://www.appleton.org/departments/utilities/water)