



## 2016 Water Quality Report

"... meeting community needs ... enhancing quality of life"

The Appleton Water Utility provides safe, abundant drinking water to the City of Appleton, Waverly Sanitary District, the Town of Grand Chute, and the Village of Sherwood. We want you to be confident in the safety and reliability of water you get every time you turn on the tap. The utility is a self-financed enterprise owned by the City of Appleton. Appleton water meets federal and state health-protection standards. It is regulated by the Public Service Commission (PSC) of Wisconsin, the U.S. Environmental Protection Agency (EPA), and the Wisconsin Department of Natural Resources (WDNR).



The Appleton Water Treatment Facility treats Lake Winnebago water with a multiple-step process that removes illness-causing micro-organisms and contaminants. The water is lime softened, and filtered through granular activated carbon for turbidity removal and to control taste and odor compounds. Ultraviolet Light is used as a disinfection process for

Cryptosporidium. Fluoride is added for dental health. Chlorine disinfection provides safe, high quality drinking water throughout the distribution system and to your faucets.

### Source of Appleton's Drinking Water

The source of Appleton's drinking water is Lake Winnebago. Lake Winnebago is in the Fox and Wolf River watersheds that receive water from up to 100 miles away. As water flows over land surfaces and through rivers and lakes, naturally occurring substances may become dissolved in the water. The substances are called contaminants. Surface water sources may be highly susceptible to stormwater pollution. For information on how stormwater pollution can impact our water bodies visit [www.fwwa.org](http://www.fwwa.org). Surface water is also affected by animal and human activities. 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/surface/appleton.pdf](http://www.dnr.state.wi.us/org/water/dwg/swap/surface/appleton.pdf)



POSTAL PATRON

### DEPARTMENT OF UTILITIES WATER TREATMENT FACILITY

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### Information for Persons with Compromised Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection are available from the Safe Drinking Water Hotline, 1-800-426-4791, and the Centers for Disease Control (CDC) [www.cdc.gov](http://www.cdc.gov).

### New Treatment Technology

The City of Appleton continues to evaluate effective water treatment technologies to meet regulatory requirements and has completed the construction of an ultraviolet (UV) light process as an additional disinfection barrier. UV disinfection effectively inactivates pathogens such as Cryptosporidium and Giardia that may be present in the Lake Winnebago water supply. In 2016 UV disinfection was installed at the Appleton Water Treatment Facility downstream of the plant filters, and has now replaced ultrafiltration as the pathogen inactivation process. The completed project increased pathogen removal efficiencies while reducing operating, electrical and chemical costs.

### Safe Drinking Water On Tap

The Safe Drinking Water Act provides a regulatory framework to maintain and protect public water supplies. To get an easy to read EPA booklet on drinking water go to:  
[http://water.epa.gov/drink/guide/upload/book\\_waterontap\\_full.pdf](http://water.epa.gov/drink/guide/upload/book_waterontap_full.pdf)

### Important Information

This report contains important information about your drinking water. Please contact Chris Shaw if you have any questions.  
(920) 997-4200 or [www.appleton.org](http://www.appleton.org)

### Información importante!

Este reporte contiene información importante sobre su agua potable. Por favor llámenos al (920) 997-4200, si tiene alguna pregunta o [www.appleton.org](http://www.appleton.org)

### Lug tseem ceeb rua cov siv diej kws has lug Moob

Ntawm nuav yog cov lug tseem ceeb qha txug kev haus dlej nyob nroog Appleton. (920) 997-4200, [www.appleton.org](http://www.appleton.org)

The Utilities Committee meets TUESDAY of the week following Common Council at 5:00 p.m., in Committee Room 6A of City Center.

Direct payments of your utility billing are available. Please see the City's website <http://www.appleton.org/government/finance/city-services-invoices>



## Appleton Water Treatment Facility - Safe Water on Tap

The table below identifies the regulated substances that were detected in water regulatory testing in 2016. Every regulated substance that is detected, even in trace amounts, is listed here. The level detected for these contaminants were all below levels allowed by state and federal regulations in 2016.

Contaminant (units)	MCL	MC LG	Level Found	Range	Violation	Typical Source of Contaminant
Arsenic (ppb)	10	n/a	<0.50	NA	None	Erosion of natural deposits; Run off from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.0004	NA	None	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	<0.32	NA	None	Discharge from steel and pulp mills; Erosion of natural deposits
Coliform (TCR)	>=5% of monthly samples	NA	0%	NA	None	Naturally present in the environment.
Copper (ppm) (2014)	AL=1.3 (90%)	1.3	.0776	0 of 30 results were above the action level	None	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Cyanide (ppb) (2014)	200	200	9	9	None	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Fluoride (ppm)	4	4	0.7	0.7	None	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. SMCL = 4.0 ppm
Haloacetic Acid (HAA5) multiple sites (ppb)	60	60	17 (average)	13-22	None	By-product of drinking water chlorination. Reported is the highest annual location average and largest range from the multiple sites.
Lead (ppb) (2014)	AL=15 (90%)	0	1.40	0 of 30 results were above the action level	None	Corrosion of household plumbing systems; Erosion of natural deposits
Nickel (ppb)	100		0.53	0.53	None	Occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
Nitrate (N03-N) (ppm)	10	10	0.87	0.87	None	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radium (226 + 228) (pCi/l) (2014)	5	0	1.4	1.4	None	Erosion of natural deposits
Sodium (ppm)	n/a	n/a	12.0	12.0	None	n/a
Sulfate (ppm)	n/a	n/a	31.0	31.0	None	n/a
Trihalomethanes, Total (TTHM) multiple sites (ppb)	80	0	31 (average)	24-38	None	By-product of drinking water chlorination Reported is the highest annual location average and largest range from the multiple sites.

### Definitions and Notes

**AL** – Action Level: The concentration of a contaminant which, if exceeded, triggers actions necessary by the water system such as treatment. AL of 90% for lead and copper is the 90th percentile value of all testing results.

**Haloacetic Acids** – Total of Mono-, di-, and tri-chloroacetic acid; mono- and di-bromoacetic acid; and bromochloroacetic acids

**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 – Not Applicable

ND – Not Detected

pCi/l – Picocuries per liter

ppb – Parts per billion, or micrograms per liter (ug/l)

ppm – Parts per million, or milligrams per liter (mg/l)

**SMCL** – Secondary Maximum Contaminant Level: Inorganic chemicals that are not hazardous to health but may be objectionable to an appreciable number of persons.

**Trihalomethanes, Total** – Total of chloroform, bromo-dichloromethane, dibromochloromethane and bromoform

In accordance with s. NR 810.29, Wisconsin Administrative Code, the treated surface water is monitored for turbidity to confirm that the filtered water is less than or equal to 0.3 NTU in at least 95 percent of the measurements taken each month and never exceeds 1 NTU. In 2016, the highest single entry point turbidity measurement was 0.05 NTU. The lowest monthly percentage of samples meeting the turbidity limits was 100 percent.

### Lead and Copper Monitoring

The Utility is required to periodically test for lead in the drinking water of homes. Currently there are 30 sites throughout the City that are tested for lead and copper. Lead can enter the drinking water by corrosion of home plumbing. For the last test year, 2014, and since the introduction of polyphosphates in 1994, the water supply complies with the lead and copper action levels.

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. Appleton Waterworks is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components.

Use only cold water for drinking and cooking. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap until it runs cold 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](http://www.epa.gov/safewater/lead) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)