

City of Waupaca

Public Works Department/Water Utility Division

Annual Drinking Water Report

We're very pleased to provide you with the 2015 Consumer Confidence Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources along with our commitment to ensuring the quality of your water.

Water System Information

If you would like to know more about the information contained in this report, please contact Justin Berrens, Director of Public Works at (715) 258-4420 or Mark Nollenberg, Water Superintendent at (715) 258-4423.

Opportunity for Input

The City of Waupaca Common Council meets at 6:00 P.M. every first and third Tuesday of each month. Meetings are held in the Council Chambers at 111 S. Main Street, Waupaca, WI (City Hall). The agenda allows for public input on any topic. Please feel free to attend.

Health Information

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 can be obtained by calling the 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. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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 and other microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source Water

The City of Waupaca receives 100% of its drinking water from groundwater sources via 7 shallow wells. A list of the wells are included below. To obtain a summary of the source water assessment please contact, Justin Berrens at (715) 258-4420.

Source ID	Source	Depth (in feet)	Status
2	Groundwater	45	Active
3	Groundwater	67	Active
4	Groundwater	88	Active
5	Groundwater	84	Active
6	Groundwater	75	Active
7	Groundwater	74	Active
8	Groundwater	69	Active

Educational 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 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 stormwater 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 stormwater 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 stormwater 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Definitions

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
MFL	million fibers per liter
MRDL	Maximum residual disinfectant level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum residual disinfectant level goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants

Your water was tested for many contaminants last year. We are pleased to report that our City of Waupaca drinking water is **safe** and **has again met and exceeded** all regulated federal and state requirements in 2015. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date. The following table summarizes the results of our monitoring from January 1, 2015 to December 31, 2015.

Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
ARSENIC (ppb)		10	n/a	1	1 - 1	6/30/2014	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)		2	2	0.058	0.023 - 0.058	6/30/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM (ppb)		100	100	1	0 - 1	6/30/2014	No	Discharge from steel and pulp mills; Erosion of natural deposits
FLUORIDE (ppm)		4	4	1.0	0.2 - 1.0	6/30/2014	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)		100		1.8000	0.5100 - 1.8000	6/30/2014	No	Nickel 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	7.88	2.90 - 9.10		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)		n/a	n/a	77.00	5.70 - 77.00	6/30/2014	No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.4400	1 of 20 results were above the action level.		No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	4.50	0 of 20 results were above the action level.		No	Corrosion of household plumbing systems; Erosion of natural deposits

Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)		15	0	3.0	0.0 - 3.0	6/30/2014	No	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)		5	0	3.0	1.0 - 3.0	6/30/2014	No	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	3.0	0.0 - 3.0	6/30/2014	No	Erosion of natural deposits
COMBINED URANIUM (ug/l)		30	0	2.8	1.4 - 2.8	5/4/2011	No	Erosion of natural deposits

Volatile Organic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2015)	Violation	Typical Source of Contaminant
TETRACHLOROETHYLENE (ppb)		5	0	0.5	0.5		No	Leaching from PVC pipes; Discharge from factories and dry cleaners

Health effects for any contaminants with MCL violations/Action Level Exceedances

Contaminant Health Effects

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 Wilsons Disease should consult their personal doctor.

Additional Health Information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

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. Waupaca Waterworks 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.

As noted in this report, the city's drinking water is **fluoridated**. According to the US Centers for Disease Control, if a child under 6 months of age consumes infant formula reconstituted with fluoridated water, there may be an increased chance of adverse health effects. For more information, please consult with a health care provider.

Other Compliance

Monitoring and Reporting Violations

Description	Contaminant Group	Sample Location	Compliance Period Beginning	Compliance Period Ending
DBP Monitoring/Reporting	Dbp	Distribution System	8/1/2015	8/31/2015

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the compliance period noted in the above table, we did not complete all monitoring or testing for the contaminant(s) noted, and therefore cannot be sure of the quality of your drinking water during that time.

The WDNR notified Waupaca Waterworks on September 21, 2015 for Noncompliance to perform Disinfection Byproduct (DBP) Monitoring sampling. Samples were taken, however, they were pulled from the wrong sites. Sampling locations as detailed by the "Monitoring Site Plan" should have pulled from "Stage 2" but were pulled from "Stage 1" instead. As a result, it was recorded as a missing sample.

Corrective Action Taken

Staff will be more careful when reviewing the monitoring plan and ensure the specified sampling sites are correct. The action was implemented immediately.

Violation of the Terms of a Variance, Exemption, or Administrative or Judicial Order

The WDNR notified Waupaca Waterworks on December, 17 2015 for failure to submit Monthly Operating Report for the month of November, 2015. The report was created and ready for submittal. Staff did not submit within the allowed timeline (10 days). The report was submitted promptly upon notification.

Noncompliance with Recordkeeping and Compliance Data

The WDNR notified Waupaca Waterworks on January 21, 2016 for Lead Customer Notification Violation. All samples were collected correctly and results as shown in "Detected Contaminants" section were provided to home owner's. The Waupaca Waterworks did not submit the proper WDNR form electronically to show that the home owner's notification had occurred.

Corrective Action Taken

Staff will ensure the use and submittal of proper WDNR forms in the next round of sampling.