



# 2012 Water Quality Report

## Neenah Water: Quality From the Tap

This is the fifteenth annual report on the quality of water delivered by the Neenah Water Utility. This report meets the Federal Safe Drinking Water Act (SDWA) requirements for "Consumer Confidence Reports", and contains information on the source of Neenah's water, its constituents, and the health risks associated with the contaminants.

### Lake Winnebago is Primary Source of Neenah Drinking Water

The Neenah Water Treatment Plant is supplied by surface water from Lake Winnebago. We also have an emergency intake in the Fox River near Riverside Park. 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 human activity. Contaminants that may be present in source water include:

1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
2. 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.
3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
4. 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.
5. 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.

### TURBIDITY

Turbidity is caused by small, suspended particles in the water. These particles can be either organic material, such as leaf mold and animal waste, or inorganic material, such as sand and clay. Excessive turbidity is a problem for several reasons.

- It protects microorganisms from chlorine and other disinfectants.
- It acts as a food source for microorganisms, allowing them to survive and multiply in the distribution system.
- It interferes with the maintenance of a chlorine residual in the distribution system.
- It interferes with the test for coliform bacteria.

From a public health standpoint, turbidity in drinking water should be less than 1 NTU. The City of Neenah's highest single measurement was 0.13NTU and the lowest percentage was 100%.

### 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 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 and other microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

### En Español

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

### For More Information on Any Topic in This Report, Call the Numbers Listed Below:

- Mark Zempel, Plant Manager : 920-886-6196 E-mail: mzempel@ci.neenah.wi.us
- Water Quality, Treatment, Leaks and Main Breaks: 886-6190
- Billing Questions, Name Changes, and Final Readings: 886-6149

## NUMBER OF CONTAMINANTS REQUIRED TO BE TESTED

This table displays the number of contaminants that were required to be tested in the last five years. The CCR may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the CCR. If testing is done less frequently, the results shown on the CCR are from the past five years.

Contaminant Group	# of Contaminants	Term	Definition
Disinfection Byproducts	2	AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Inorganic Contaminants	17	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.
Microbiological Contaminants	2	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.
Radioactive Contaminants	3	MFL	Million fibers per liter
Synthetic Organic Contaminants including Pesticides and Herbicides	28	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.
Unregulated Contaminants	34	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.
Volatile Organic Contaminants	20	mrem/year	Millirems per year (a measure of radiation absorbed by the body)
		n/a	Not applicable
		nd	None detected
		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.

Microbiological Contaminants

Contaminant (units)	MCL	MCLG	Count Positives	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
COLIFORM(TCR)	Presence of coliform bacteria in >=5% of monthly samples	0	1		No	Naturally present in the environment

Disinfection Byproducts

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
HAA5 (ppb)	60	60	29	14-40		No	By-product of drinking water chlorination
TTHM (ppb)	80	0	47.8	21.2-62.4		No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
ARSENIC (ppb)	10	n/a	1	1		No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	0.005	0.005		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM (ppb)	100	100	1	1		No	Discharge from steel and pulp mills; Erosion of natural deposits
COPPER (ppm)	AL=1.3	1.3	0.032	0 of 30 results were above the action level.		No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
CYANIDE (ppb)	200	200	12	12	04/13/2011	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
FLUORIDE (ppm)	4	4	0.7	0.7		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	13	2 of 30 results were above the action level.		No *	Corrosion of household plumbing systems; Erosion of natural deposits
NICKEL (ppb)	100	n/a	0.91	0.91		No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (NO3-N) (ppm)	10	10	0.03	0.03		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	11.00	11.00		No	n/a

\* Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you want information on the NUMBER of sites or the actions taken to reduce these levels, please contact your water supply operator.

Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2011)	Violation	Typical Source of Contaminant
RADIUM, (226 + 228) (pCi/l)	5	0	1.0	1.0	05/07/2009	NO	Erosion of natural deposits

Unregulated Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
BROMODICHLOROMETHANE (ppb)	n/a	n/a	5.03	3.20- 6.30		No	n/a
CHLOROFORM (ppb)	n/a	n/a	42.75	18.00- 57.00		No	n/a
DIBROMOCHLOROMETHANE (ppb)	n/a	n/a	0.15	nd- 0.29		No	n/a
SULFATE (ppm)	n/a	n/a	27.00	27.00		No	n/a

### Water Commission Meeting Schedule

The Neenah Water Commission meets at 4:30 on the third Monday of each month. The meetings are in the Council Chambers at City Hall, 211 Walnut Street, Neenah.