

# 2009 WATER QUALITY REPORT

#### CHIPPEWA FALLS WATER DEPARTMENT

**JUNE 2010** 

We're pleased to present you with the 2009 Water Quality Report. This annual report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continuously improve water quality and protect our water resources.

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.

The City is in the process of constructing a Water Treatment Plant for the three West Well Field wells. The plant features a pressure filter with a "Green Sand" filter media. The treatment plant is being built as a result of increasing instances of discolored water caused by higher than normal content of iron and manganese in the source water at West Wells number two and three. An August 2010 completion date is expected. Please visit our website for more information about the Water Treatment Plant.

## Where Does our Water Come From?

Chippewa Falls relies exclusively on groundwater from drilled wells for its' municipal water supply. The wells are drilled to a depth between 53' and 97' into a sand and gravel drift formation. The West Well Field has three wells that are located at 100 Tilton Road and 1821 Nelson Road. The East Well Field has six wells and is located at 1350 Pumphouse Road.

A source water assessment is required of all public water supplies. The assessment identifies land areas that contribute water to each system, significant potential contaminant sources within those areas, and the susceptibility of the drinking water system to contamination. This report is available on the Wisconsin DNR web site and can be accessed at: <a href="https://dnr.wis.gov/org/water/dwg/swap/index.htm">dnr.wis.gov/org/water/dwg/swap/index.htm</a>. Click on "Find an Assessment", type "Chippewa Falls Waterworks" in the NAME box and click FIND.

# **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 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.

# **Monitoring Results**

The Chippewa Falls Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1 to December 31, 2009. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

## **Substances Detected in Chippewa Falls Water**

## **Disinfection Byproducts**

			Level			
Contaminant (units)	MCL	MCLG	Found	Range	Violation	Typical Source of Contaminant
						By-product of drinking water chlori-
ТТНМ (ppb)	80	0	7.7	5.1 - 7.7	NO	nation
HAA5 (ppb)	60	60	1	nd - 1	NO	

#### **Inorganic Contaminants**

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date if prior to 2009	Violation	Typical Source of Contaminant
Arsenic (ppb)	10	n/a	1	Trange	6/26/2008	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	.015	.010015	6/26/2008	NO	Discharge of drilling wastes; Dis- charge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	1	1 - 1	6/26/2008	NO	Discharge from steel and pulp mills; Erosion of natural deposits
Copper (ppm)	AL=1.3	1.3	.0720	0 of 30 results were above the action level.	7/17/2008	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4	4	.1	.11	6/26/2008	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	AL=15	0	2.70	0 of 30 results were above the action level.	6/18/2008	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Nickel (ppb)	100		.8800	.65008800	6/26/2008	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	6.93	1.90-9.80		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (N02-N) (ppm)	1	1	.014	nd014	6/26/2008	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	n/a	n/a	20.00	9.30 - 20.00	6/26/2008	NO	n/a

#### **Microbiological Contaminants**

Contaminant (units)	MCL	MCLG	Count of Positives	Sample Date if Prior to 2009	Typical Source of Contaminant
Coliform (TCR)	Presence of coliform bacteria in >=5% of monthly samples	0	1		 Naturally present in the environ- ment

#### **Radioactive Contaminants**

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date if Prior to 2009	Violation	Typical Source of Contaminant
Radium, (226 + 228) (pCi/l)	5	0	1.5	1.0 - 1.5		NO	Erosion of natural deposits

#### **Synthetic Organic Contaminants including Pesticides and Herbicides**

					<b>Sample Date</b>		
			Level		if Prior to		
Contaminant (units)	MCL	MCLG	Found	Range		Violation	Typical Source of Contaminant
DI(2-Ethylhexyl) Phthalate							Discharge from rubber and chemical facto-
(ppb)	6	0	.9	.9	6/26/2008	NO	ries

### **Unregulated Contaminants**

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date if Prior to 2009	Violation	Typical Source of Contaminant
Bromodichloromethane (ppb)	n/a	n/a	2.60	1.80 - 2.60		NO	n/a
Bromoform (ppb)	n/a	n/a	.35	nd35		NO	n/a
Chloroform (ppb)	n/a	n/a	3.50	1.40 - 3.50		NO	n/a
Dibromochloromethane (ppb)	n/a	n/a	.60	.94 - 1.60		NO	n/a
Sulfate (ppm)	n/a	n/a	8.40	5.10 - 8.40	6/26/2008	NO	n/a

#### **Volatile Organic Contaminants**

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date if Prior to 2009	Violation	Typical Source of Contaminant
Dichloromethane (ppb)	5	0	1.0	nd-3.60			Discharge from pharmaceutical and chemical factories
Toluene (ppm)	1	1	.0000	nd—.0001		NO	Discharge from petroleum factories

#### **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
Disinfection Byproducts	2
Inorganic Contaminants	17
Microbiological Contaminants	2
Radioactive Contaminants	3
Synthetic Organic Contaminants including Pesticides and Herbicides	25
Unregulated Contaminants	34
Volatile Organic Contaminants	20

#### **Definition of Terms**

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
AL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the
MCL	MCLGs as feasible using the best available treatment technology.
	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to
MCLG	health. MCLGs allow for a margin of safety.
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
TCR	Total Coliform Rule



Chippewa Falls Water Dept. 30 W Central St., Room 209 Chippewa Falls, WI 54729

# **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 at 1-800-426-4791.

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 at 1-800-426-4791.

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.

# **Questions or Comments**

If you have any questions about this report or concerning your water utility, please contact Connie Freagon, Utility Office Manager at 726-2741, Rory Olson, Water Supervisor at 720-6981 or Rick Rubenzer, Utility Manager at 726-2736 or email us at utility@chippewafalls-wi.gov.

Our office is located in the City Hall Building, 30 W. Central Street, Room 209. Office hours are 8:30 a.m. to 4:30 p.m.

# **Getting Involved**

We want our customers to be informed about their water utility. To get involved:

- Attend any of our regularly scheduled City Council or Board of Public Works Committee meetings.
- Join the Groundwater Guardian Team.

Please call for meeting times, locations and agendas.