



## **ANNUAL DRINKING WATER QUALITY REPORT FOR NIAGARA WATERWORKS 2008**

We are pleased to present to you this year's annual quality water report. This 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 continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is ground water. The wells draw water from 60 to 200 feet below ground level. The Niagara Waterworks along with the Wisconsin Rural Water Association have started a Wellhead Protection Plan. Wellhead Protection aims at preventing contaminants from entering the areas of land around our public water wells. Potential sources of contamination were identified and documented in map form.

I am pleased to report that our drinking water is safe and meets Federal and State requirements. If you have any questions about this report or concerning your Water Utility, please contact Stephen Zigman at 251-3177 or 251-4558. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the third Wednesday of each month at 7:00 p.m. in the Niagara City Hall.

Niagara Waterworks routinely monitors for constituents in your drinking water according to federal and state laws. The following table shows the results of our monitoring for the period of January 1, 2008 to December 31, 2008. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk. In this table you will find many terms and abbreviations you might not be familiar with. To help better understand these terms we have provided the following definitions:

The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

In addition to the table, testing was performed for 56 other constituents and no detectable amounts were found in our water.

As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is safe at these levels.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic, or inorganic chemicals or radioactive materials.

All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about the contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCLS's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one in one million chance of having the described health effect.

A new MCL was set for arsenic in 2006 and was reduced from 50ppb to 10ppb. Niagara's #2 Well indicated arsenic levels above the new MCL. This Well will be used in emergency situations only. Our new Well #4 was drilled in the spring of 2008. This Well should be operating the Fall of 2009. Arsenic levels in the groundwater at this location are currently at 4.5 ppb which is less than half of the MCL.

The City of Niagara is required under Wisconsin Administrative Code to sample each water well every three years for organics, IOC's, SOC's and VOC's. All required testing was performed on our newly drilled Well #4 in May 2008. Well #4 is located 75 feet from Well #2. Both Well #2 and Well #4 have similar depths and soil profiles. The City decided to not perform all of the required testing for #2 Well because water testing at #4 Well would show a representative sample of the #2 Well aquifer. The incomplete sampling of #2 Well water was a violation of Wisconsin's Safe Drinking Water Regulations. This violation requires a notification to our customers of the failure to perform required monitoring (in 2009). Well #2 was not used in 2008 and will be abandoned in 2009. This violation will not be an issue once #2 Well is abandoned in 2009.

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 microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

On several occasions this year, some customers have noticed a reddish-brown tint in their water. The discoloration is caused by soluble and insoluble iron. Iron in drinking water does not pose a health threat. Reversing water flows, system maintenance, and water main flushing all contribute to occasional red-water occurrences. Annual water system flushing along with a sequestering agent is used to reduce the occurrence of red-water in our water system.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvement in your water system. The costs of these improvements may be reflected in the rate structure.

The Niagara Waterworks would like to thank the homeowners who participated in the lead and copper sampling program since 1993. We hope you will continue to support this program, which will allow the utility to meet Federal and State Water Quality Requirements.

We at the Niagara Public Works Department work around the clock to provide quality water to all of our customers.

Sincerely,

Stephen Zigman

## 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.

Contaminant Group	# of Contaminants
Inorganic Contaminants	16
Microbiological Contaminants	2
Radioactive Contaminants	1
Synthetic Organic Contaminants including Pesticides and Herbicides	27
Unregulated Contaminants	33
Volatile Organic Contaminants	20

## INORGANIC CONTAMINANTS

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical Source of Contaminant
ARSENIC (ppb)	10	N/a	2.5	2.5	7-17-08	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppb)	2000	2000	6.7 (Average)	6.7	7-17-08	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
COPPER (ppb) <i>*Household Samples*</i>	1300	1300	358 (Average)	[8.3] – 750	4-24-2008	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4	1.07 (Average)	0.82 – 1.28	2008	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb) <i>*Household Samples*</i>	AL=15	0	1.37 (Average)	[0.57] – 3.3	4-22-2008	NO	Corrosion of household plumbing systems; Erosion of natural deposits
NITRATE (N03-N) (ppm)	10	10	ND	ND	7-10-2008	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural

							deposits
SODIUM (ppm)	N/a	N/a	8.4 (Average)	8.4	7-20-2008	NO	n/a

## ADDITIONAL HEALTH INFORMATION

Some people who drink water containing **arsenic** in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.

## 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.
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
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.