



Middleton Water Utility

2009 Water Quality Report

We're pleased to present this year's Water Quality Report. This report is designed to inform you about the quality of water 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.

Source of Water

Middleton draws its water from five sandstone wells, ranging in depth from 330 feet to 856 feet. These wells penetrate the Franconia, Galesville, Eau Claire and Mount Simon formations. The City has provided the Wisconsin Department of Natural Resources with inventory data on these wells which will be used to prepare a source water assessment plan.

This report shows our water quality and what it means

If you have any questions with this report, please contact the **Middleton Water Utility at (608) 827-1070**. 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 at the City of Middleton-7426 Hubbard Avenue at 7:00 pm on the 2nd and 4th Mondays of each month.

The Middleton Water Utility routinely monitors for constituents in our drinking water according to Federal and State laws. The table shows the results of our monitoring for the period of January 1st to December 31st, 2009.

Wellhead Protection

The City of Middleton recently adopted a Wellhead Protection Plan and Ordinance. The purpose of these land use controls is to help protect the source of our drinking water. Copies of the plan are available for inspection at City Hall

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.
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.
nd	No detect
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)
TCR	Total Coliform Rule

TEST RESULTS

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 average	nd - 2	09/02/2008	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	.038 average	.018-.070	09/02/2008	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM (ppb)	100	100	1 average	nd - 2	09/15/2008	NO	Discharge from steel and pulp mills; Erosion of natural deposits
COPPER (ppm)	AL=1.3	1.3	.394 average	.0290-2.4200	05/16/2008	*	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4	1.1 average	nd - 1.5	09/15/2008	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	5 average	nd - 9.80	05/06/2008	NO	Corrosion of household plumbing systems; Erosion of natural deposits
NICKEL (ppb)	100		1.2500 average	nd-3.0000	09/02/2008	NO	Nickel occurs naturally in soils, groundwater and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (N03-N) (ppm)	10	10	4.35	nd - 4.35		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	7.84 average	3.11-17.30	09/15/2008	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 supplier.

Radioactive Contaminants							
Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2009)	Violation	Typical Source of Contaminant
Gross Beta Particle Activity (pCi/l)	n/a	n/a	2.5 (average)	1.5 - 3.6	03/17/2008	NO	Decay of natural and man-made deposits. MCL units are in millirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/l.
RADIUM, (226+228)(pCi/l)	5	0	1.4 (average)	nd - 3.1	03/17/2008	NO	Erosion of natural deposits
Combined Uranium (ug/l)	30	0	1.5	nd - 1.5	03/04/2008	NO	Erosion of natural deposits
Gross Alpha, Incl. R&U (n/a)	n/a	n/a	9.0	nd - 9.0	03/17/2008	NO	Erosion of natural deposits

Disinfection Byproducts							
Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2009)	Violation	Typical Source of Contaminant
HAA5 (ppb)	60	60	1	nd-1		NO	
TTHM (ppb)	80	0	8.7	3.1-8.7		NO	By-product of drinking water chlorination

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	1.30	.83-1.30		NO	n/a
BROMOFORM (ppb)	n/a	n/a	.81	.62-.81		NO	n/a
CHLOROFORM (ppb)	n/a	n/a	5.30	.68-5.30		NO	n/a
DIBROMOCHLOROMETHANE (ppb)	n/a	n/a	1.30	.96-1.30		NO	n/a
SULFATE (ppm)	n/a	n/a	22.00	nd – 22.00	11/04/2008	NO	n/a

Number of Contaminants Required to be Tested
This includes all contaminants that were required to be tested in the last 5 years.

Contaminant Group	# of Contaminants
Disinfection Byproducts	2
Inorganic Contaminants	16
Microbiological Contaminants	2
Radioactive Contaminants	3
Synthetic Organic Contaminants including Pesticides and Herbicides	25
Unregulated Contaminants	34
Volatile Organic Contaminants	20

Explanation of Test Results

As you can see by the table, our system had no violations. We're 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 man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

All 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 the 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a million chance of having the described health effect.

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 1-800-426-4791.

Please call the **Middleton Water Utility at (608) 827-1070** if you have any questions.



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