

Mequon Water Utility 11333 N Cedarburg Rd Mequon, WI 53092 262.236.8150 www.ci.mequon.wi.us

2012 Annual Water Quality Report

The Mequon Water Utility is pleased to present you with this year's Annual Water Quality Report. This report is designed to keep you informed about the quality of water we deliver you every day. If you have any questions about this report or other concerns about water quality, please call our Water Operations Superintendent Jim Voigt at (262) 236-8151 or email mequonwater@ci.mequon.wi.us. We also have additional information available at our office regarding our two water suppliers: Milwaukee Water Works and North Shore Water Commission.

Regulatory Compliance

Drinking water standards are regulations that the U.S. Environmental Protection Agency (EPA) sets to control the level of contaminants in the nation's drinking water. These standards are part of the Safe Drinking Water Act (SDWA) that was signed into law in 1974. To continually improve the standards, the existing regulations are periodically updated to address the emergence of new technology and new research. These regulations are reviewed and then enforced by the Wisconsin Department of Natural Resources (WDNR).

Last year, as in years past, your tap water met all EPA and State drinking water health standards. Our two Water Treatment Plant Suppliers (Milwaukee Water Works and North Shore Water Commission) vigilantly safeguard their water supplies, and both report that they have not violated a maximum contaminant level or any other water quality standards.

Monitoring Results

We have learned through monitoring and testing that some contaminants have been detected; however, the EPA (Environmental Protection Agency) has determined that your water IS SAFE at these levels. All sources of drinking water are subject potential contamination contaminants that are naturally occurring or man made. Those contaminants 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 the water poses a health risk. Maximum Contaminant Levels are set at very stringent levels. To understand the possible 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 people, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water. EPA/CDC (Center for Disease Control) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other micro-biological contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.



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Substance	Ideal Goals (MCLG)	Highest Level Allowed (MCL)	Median Value	Highest Level Detected	Source(s) of Contaminant
Aluminum	0.2 mg/L	NR	0.047 mg/L	0.119 mg/L	Water treatment additive; Natural deposits
Barium	2 mg/L	2 mg/L	0.02 mg/L	0.02 mg/L	Natural deposits
Chlorine, total	4 mg/L	4 mg/L	0.91 mg/L	1.71 mg/L	Residual of drinking water disinfection
Chromium, hexavalent	100 μg/L	100 μg/L	0.22 μg/L	0.41 μg/L	Natural deposits
Copper (2010)	1.3 mg/L	1.3 mg/L (AL)	0.044 mg/L (AL)	NR	Corrosion of household plumbing systems
Cyanide (2011)	200 μg/L	200 μg/L	14 - 21 μg/L (Range)	21µg/L	Discharge from metal/plastic factories
Fluoride	4 mg/L	4 mg/L	0.97 mg/L	1.35 mg/L	Water treatment additive; Natural deposits
Haloacetic Acids, total(2012)	NA	60 μg/L	2.75 μg/L	4.0 μg/L	Byproduct of drinking water disinfection
Lead (2010)	Zero	15 μg/L (AL)	ND	NR	Corrosion of household plumbing systems
Organic Carbon, total	TT	TT	1.2 mg/L	1.4 mg/L	Natural deposits
Potassium	NR	NR	1.4 mg/L	1.6 mg/L	Natural deposits
Radium, combined	Zero	5 pCi/L	1.98 pCi/L	1.99 pCi/L	Natural deposits
Sodium	NR	NR	9.3 mg/L	17.0 mg/L	Natural deposits
Sulfate	500 mg/L	NR	26 mg/L	28 mg/L	Natural deposits
Trihalomethanes, total(2012)	NA	80 μg/L	6.6 µg/L	10 μg/L	Byproduct of drinking water disinfection
Turbidity	NA	<0.3 NTU 95% of the time	0.04 NTU 95% of the time	0.08 NTU 1-day max	Natural deposits
Uranium, total	Zero	20 pCi/L	0.23 pCi/L	0.25pCi/L	Natural deposits



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Abbreviations and Definitions

Not Applicable (NA): Not applicable.

Not Detected (ND): Laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l): One part per million corresponds to one minute in two years, or a single penny in \$10,000.00

Parts per billion (ppb) or Micrograms per liter (µg/L): One part per billion corresponds to one minute in 2000 years, or a single penny in \$10,000,000.00

<u>Picocuries per liter (pCi/L):</u> Picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU):

Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>Treatment Technique (TT)</u> A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL): The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Education 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 maybe 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 discharge, 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 Contaminant, 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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which should provide the same protection for public health.



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Location

Billing Office: Mequon Finance Dept.

11333 N Cedarburg Rd Mequon, WI 53092 (262) 236-2947

Operations: Water Utility Office

10800 N Industrial Dr Mequon, WI 53092 (262) 236-8151

Additional Information

For additional information about water quality on the internet, please visit the

WDNR's web site at:

http://dnr.wi.gov/org/water/dwg

the EPA's web site at:

http://www.epa.gov/safewater

the North Shore Water Commission at:

http://www.northshorewc.com the Milwaukee Water Works at: http://city.milwaukee.gov/water