



2014 Bayside Customer Consumer Confidence Report

The U.S. Environmental Protection Agency (EPA) and Wisconsin Department of Natural Resources (DNR) require drinking water utilities to provide an annual Consumer Confidence Report to inform you of the source and quality of your drinking water, compliance and detected contaminants, and results from treating and monitoring water January 1 – December 31, 2014.

Important Information

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Información Importante para nuestros clientes que hablan español

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo o hable con alguien que lo entienda bien.

Item 1: Water System Information

If you have questions about this report, please call a Water Quality Representative at the Mequon Water Utility, (262) 236-8150.

Participate in decisions that affect drinking water quality at meetings of the City of Mequon Water Commission, which meets at Mequon City Hall, 11333 N Cedarburg Rd, Mequon, WI 53092, and at meetings of the City of Mequon Common Council, 11333 N Cedarburg Rd, Mequon, WI 53092. The Water Commission and Common Council meetings vary. Please contact the City Clerk for a schedule at (262)236-2912, or visit <http://www.ci.mequon.wi.us>

Item 2: Source of Water

Mequon Water Utility is a consecutive system of the North Shore Water Commission. The North Shore Water Commission water source is surface water from Lake Michigan.

Item 3: Definitions

<	"less than" or not detected
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow. Action Levels are reported at the 90 th percentile for homes at greatest risk.
Haloacetic Acids	HAA5: Monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, dibromoacetic acid, tribromoacetic acid, bromochloroacetic acid, dibromochloroacetic acid, and bromodichloroacetic acid.
HA	Health Advisory: An estimate of acceptable drinking water levels for a chemical substance based on health effects information; a Health Advisory is not a legally enforceable federal standard, but serves as technical guidance to assist federal, state and local officials.
Median	The middle value of the entire data set for the parameter (range from high to low)
µg/L	microgram per liter or parts per billion
MCL	Maximum Contaminant Level: The highest level of a contaminant 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.

Median	The middle value of the entire data set for the parameter (range from high to low).
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.
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.
mg/L	milligram per liter or parts per million
NA	Not Applicable
NR	Not Regulated
NTU	Nephelometric Turbidity Unit: A unit to measure turbidity.
pCi/L	Picocuries per Liter: A measure of radioactivity. A picocurie is 10 ⁻¹² curies.
RAA	Running Annual Average: The average of four quarterly samples collected in one 12-month period.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water
Trihalomethanes	TTHMs: Chloroform, bromodichloromethane, dibromochloromethane, and bromoform
Turbidity	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. During 2014, the highest Single entry point turbidity measurement was 0.18 NTU. The lowest Monthly percentage of samples meeting the turbidity Limits was 100 percent.

Item 4: Detected Contaminants

The table below shows the regulated contaminants detected in Mequon's drinking water during 2014. It also includes any detected contaminants found in the recently completed (2013) Unregulated Contaminant Monitoring Rule – Phase 3 (UCMR-3) mandatory monitoring program. **All contaminant levels are within applicable state and federal laws.** The table contains the name of each contaminant, the highest level regulated (Maximum Contaminant Level, or MCL), the ideal goals for public health (Maximum Contaminant Level Goal, or MCLG), the median value detected, the usual sources of such contamination, and footnotes explaining the findings and units of measurement. The presence of a substance in drinking water does not necessarily indicate the water poses a health risk. Certain quantities of some substances are essential to good health, but excessive quantities can be hazardous.

Parameter & (Units)	Compliance Status	Level Found (Range)	MCL	MCLG	Typical Source of Contamination / Notes
Coliform (TCR)	☺	0%	< 5% of all monthly samples	0	Naturally present in the environment
Antimony (ppb)	☺	0.19	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	☺	0.69	10	NA	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppb)	☺	0.02	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	☺	0.35	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper (ppm) 2014	☺	0.16 (AL)	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide (ppb)	☺	10	200	200	Discharge from steel/metal factories/ discharge from plastic and fertilizer factories
Fluoride (ppm)	☺	0.8 -- Ave (0.7 - 1.4)	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (ppb) 2014	☺	1.4 (AL)	15	0	Corrosion of household plumbing systems; erosion of natural deposits

Parameter & (Units)	Compliance Status	Level Found (Range)	MCL	MCLG	Typical Source of Contamination / Notes
Nickel (ppb)	☺	0.79	100	NA	Nickel occurs naturally in soils, groundwater and surface waters and is often used in electroplating, stainless steel and alloy products
Nitrate (NO ₃ -N) (ppm)	☺	0.32	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	☺	9.7	NA	NA	NA
Bromo-dichloromethane (ppb)	☺	6.2	NA	NA	By-product of drinking water chlorination
Bromoform (ppb)	☺	0.4	NA	NA	By-product of drinking water chlorination
Dibromochloromethane (ppb)	☺	3.8	NA	NA	By-product of drinking water chlorination
HAA5 (ppb) 2014	☺	1.1	60	60	By-product of drinking water chlorination
TTHM (ppb) 2014	☺	5.8 Max (5.5 Ave)	80	0	By-product of drinking water chlorination
Hexachloro-cyclopentadiene (ppb)	☺	0.44	50	50	Discharge from chemical factories
Sulfate	☺	24	NA	NA	NA

5: Information on monitoring for *Cryptosporidium*, Radon, and Other Contaminants (if detected)

EPA periodically requires water systems to test for unregulated contaminants to better understand their occurrence in drinking water. These compounds are not regulated, and therefore, have no additional reporting and/or treatment requirements. Along with many other water utilities, Whitefish Bay (a North Shore Water Commission owner) was selected by the EPA to conduct this important testing in summer 2014 to summer 2015. The following compounds were tested under UCMR3:

- 1,2,3-trichloropropane
- Chlorodifluoromethane (HCFC-22)
- Vanadium
- Chromium
- Perfluorooctanoic acid (PFOA)
- Perfluorononanoic acid (PFNA)
- Bromomethane,
- 1,3-butadiene
- Molybdenum
- Chromium-6
- Perfluorobutanesulfonic acid (PFBS)
- Chloromethane
- 1,1-dichloroethane
- Cobalt
- Chlorate
- Perfluorohexanesulfonic acid (PFHxS)
- Bromochloromethane (Halon 1011)
- 1,4-dioxane
- Strontium
- Perfluorooctanesulfonic acid (PFOS)
- Perfluoroheptanoic acid (PFHpA)

Item 6: Compliance with Other Drinking Water Regulations (no violations)

Mequon Water Utility had no MCL exceedances. The Mequon Water Utility missed one set of Disinfection By Product samples for the 3rd quarter of 2014. All prior DPB samples have indicated that the water served is well within EPA Standards.

Item 7: Variances and Exemptions (not applicable)**Item 8: Required 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 from 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.

To ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. 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, 800-426-4791. The table of contaminants detected by the Mequon Water Utility and its water supplier is on pages 2-3 of this report.

Health Precautions

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immunocompromised 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 tap water from their health care providers. EPA/CDC (Centers for Disease Control) 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 800-426-4791, and the CDC at cdc.gov/parasites/crypto.

Cryptosporidium

Cryptosporidium is a microscopic protozoan that when ingested, can result in diarrhea, fever, and other gastrointestinal symptoms. The organism is found in many surface water sources (lakes, rivers, streams) and comes from human and animal wastes in the watershed. The risk of *Cryptosporidium* from drinking water in Mequon is extremely low due to an effective treatment combination implemented by our supplier.

Lead and Copper

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Mequon Water Utility is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline, 1-800-426-4791, or at epa.gov/safewater/lead.

Notice to Parents of Infants Six Months of Age or Younger

According to the CDC, the proper amount of fluoride from infancy and at all ages throughout life helps prevent and control tooth decay (cavities). Therefore, the Mequon Water Utility, following public health recommendations, maintains a level of fluoride in our drinking water that is both safe and effective.

The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of a child's life, followed by continued breastfeeding as complementary foods are introduced, for optimal short- and long-term health advantages. Go to <http://pediatrics.aappublications.org/content/129/3/e827.full> for more information.

Mequon Water Utility water is fluoridated at a level of 0.7 – 1.4 mg/L. According to the CDC, for infants up to six months of age, if tap water is fluoridated or has substantial natural fluoride (0.7 mg/L or higher) and is being used to dilute infant formula, a parent may consider using a low-fluoride alternative water source. Bottled water known to be low in fluoride is labeled as purified, deionized, demineralized, distilled, or prepared by reverse osmosis. Ready-to-feed (no-mix) infant formula typically has little fluoride and may be preferable at least some of the time. If breastfeeding is not possible, parents should consult a pediatrician about an appropriate infant formula option. Parents should be aware that there may be an increased chance of mild dental fluorosis if the child is exclusively consuming infant formula reconstituted with fluoridated water. Dental fluorosis is a term that covers a range of visible changes to the enamel surface of the tooth. Go to http://www.cdc.gov/fluoridation/safety/infant_formula.htm for more information on dental fluorosis and the use of fluoridated drinking water in infant formula.

4/6/15

