

# 2016 Consumer Confidence Report Data

## MUSKEGO WATER UTILITY, PWS ID: 26817417

### Water System Information

If you would like to know more about the information contained in this report, please contact Scott Kloskowski at (262) 679-4128.

### Opportunity for input on decisions affecting your water quality

Public Works Committee held on the third Monday of each month at Muskego City Hall.

### As of January 1, 2017 Water Rates

<u>Meter Size</u>	<u>Quarterly Service Charge</u>	<u>Public Fire Protection (Hydrant Rental)</u>
5/8"	\$ 26.22	\$ 8.85
3/4"	\$ 26.22	\$ 8.85
1"	\$ 39.34	\$ 22.29
1 1/4"	\$ 55.73	\$ 32.78
1 1/2"	\$ 70.15	\$ 44.26
2"	\$ 102.94	\$ 72.12
3"	\$ 171.78	\$ 134.40
4"	\$ 272.08	\$ 222.91

#### Plus Volume Charge per Quarter

\$3.39 per 1,000 gallons First 30,000 gallons

\$2.96 per 1,000 gallons Next 90,000 gallons

\$2.52 per 1,000 gallons Over 120,000 gallons

### 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 (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 (800-426-4791).

## Source(s) of Water

Source ID	Source	Depth (in feet)	Status
2	Groundwater	94	Active
3	Groundwater	330	Active
4	Groundwater	1350	Temp. Abandoned as of 05/03/16
6	Groundwater	1100	Perm. Abandoned as of 09/14/15
7	Groundwater	263	Active
8	Groundwater	327	Active
9	Groundwater	122	Active
10	Groundwater	362	Active
11	Groundwater	322	Active
12	Groundwater	400	Active
13	Groundwater	110	Active

To obtain a summary of the source water assessment please contact, Scott Kloskowski at (262) 679-4128.

## 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 storm water 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 storm water 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 storm water 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.

## Definitions

<b>Term</b>	<b>Definition</b>
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.
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
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.
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.

## Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

## Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
HAA5 (ppb)	D-43	60	60	5	5		No	By-product of drinking water chlorination
TTHM (ppb)	D-45	80	0	8.4	8.4		No	By-product of drinking water chlorination

## Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
ARSENIC (ppb)		10	n/a	7	3 - 7	3/17/2014	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)		2	2	0.149	0.012 - 0.149	3/17/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE (ppm)		4	4	1.7	0.4 - 1.7	3/17/2014	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
SODIUM (ppm)		n/a	n/a	57.20	7.00 - 57.20	3/17/2014	No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.3850	0 of 20 results were above the action level.	8/20/2014	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	6.77	1 of 20 results were above the action level.	8/20/2014	No	Corrosion of household plumbing systems; Erosion of natural deposits

## Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2016)	Violation	Typical Source of Contaminant
GROSS BETA PARTICLE ACTIVITY (pCi/l)		n/a	n/a	8.5	8.5		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.
GROSS ALPHA, EXCL. R & U (pCi/l)		15	0	14.5	14.5		No	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)		5	0	1.2	0.0 - 1.2	2/24/2014	No	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	14.5	14.5		No	Erosion of natural deposits

## Health effects for any contaminants with MCL violations/Action Level Exceedances

### Contaminant Health Effects

**LEAD** Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

### Additional Health Information

While your drinking water meets USEPA's standard for **arsenic**, it does contain low levels of arsenic. USEPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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. Muskego 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 2 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 Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

# Other Compliance

## Monitoring and Reporting Violations

Description	Contaminant Group	Sample Location	Compliance Period Beginning	Compliance Period Ending
Chem M/R - Reg - No Regular samples	Radioactive Contaminants	4	1/1/2016	3/31/2016

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. During the compliance period noted in the above table, we did not complete all monitoring or testing for the contaminant(s) noted, and therefore cannot be sure of the quality of your drinking water during that time.

## Actions Taken

The pump was pulled and the well was to be abandoned therefore unable to take another sample.

## Violation of the Terms of a Variance, Exemption, or Administrative or Judicial Order

Notice of Noncompliance - Failure to Perform Required Monitoring

## Noncompliance with Recordkeeping and Compliance Data

State Lab of Hygiene 2/10/16 entry point 4 rad sample was accidently discarded before they could analyze it for Rad 226 & 228.