



City of Milan

Annual Water Quality Report for 2016

This report covers the drinking water quality for the City of Milan, for the calendar year 2016. This information is a snapshot of the quality of the water that we provided to you in 2016. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and State standards.

Your water comes from four groundwater wells located throughout the city. The water from each of the wells is pumped to the city's water treatment plant, where air is introduced to the water to oxidize any iron in the water. After air is introduced, the water passes through a series of filters to remove the iron. As the water leaves the plant it is disinfected. The water is then pumped to the distribution system, which is approximately 30 miles of water main throughout the city, and to two 500,000 gallon elevated storage tanks, with one located on the northwest side of the city and one located on the east side of US 23.

- **Contaminants and their presence in water:** 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 **EPA Safe Drinking Water Hotline (800) 426-4791**.

- **Vulnerability of sub-populations:** 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 microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

- **Sources of Drinking Water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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 discharge, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses.

Radioactive contaminants, which are naturally occurring.

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 runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations established limits for contaminants in bottled water, which provide the same protection for public health.

The table below lists all the drinking water contaminants that we detected during the 2016 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done from January 1 to December 31, 2016. The state allows 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. All data is representative of the water quality, but some may be more than one year old.

Public participation is welcome on the second and fourth Monday on a monthly basis at the Milan City Council meeting. Details can be found at www.milanmich.org.

If you would like more information about your water, please call the Milan Water Department at 734-439-2408 or 734-439-1501.

Water Quality Data

Terms and abbreviations used below:

- **Maximum Contaminant Level Goal (MCLG):** 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.
- **Maximum Contaminant Level (MCL):** 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.
- **Maximum Residual Disinfection Level (MRDL):** The highest level of disinfection allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfection Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of use of disinfectants to control microbial contaminants.
- **N/A:** Not applicable. **ND:** Non Detect
- **ppm:** parts per million or milligrams per liter. One ppm can be equated to a single penny in \$10,000.
- **ppb:** parts per billion or micrograms per liter. One ppb can be equated to a single penny in \$10,000,000.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **RAA:** Running Annual Average. Average of test results for previous year to current year.
- **TTHM:** Total Trihalomethanes
- **HAA5:** Haloacetic Acids

Regulated Contaminants	MRDL	MRDLG	RAA	Range	Daily Sample	Violations	Typical Sources of Contaminant
Chlorine (ppm)	4	4	1.15	2.20-.46	1/1/2016 12/1/2016	No	Water additive used to control microbes

Regulated Contaminants	MCL	MCLG	Milan Water RAA	Range	Sample Date	Violations	Typical Sources of Contaminant
TTHM (ppb)	80	N/A	42	N/A	10/12/2016	No	Byproduct of drinking water disinfection
HAA5 (ppb)	60	N/A	6.0	N/A	10/12/2016	No	Byproduct of drinking water disinfection

Contaminants	MCL	MCLG	Milan Water	Range	Sample Date	Violations	Typical Sources of Contaminants
Fluoride	4 ppm	4 ppm	0.31 ppm	N/A	5/18/2016	No	Erosion of natural deposits
Sodium	N/A	N/A	37mg/l	N/A	10/25/2016	No	Naturally present in groundwater
Hardness	N/A	N/A	670 mg/l	N/A	10/25/2016	No	Naturally present in groundwater

Contaminants	Action Level	Samples Over AL	90 th percentile	Sample Dates	Typical Sources of Contaminant
Lead *	15 ppb	0	3.4 ppb	6/1/2015 – 7/8/2015	Corrosion of household plumbing systems; Erosion of natural deposits
Copper**	1300 ppb	1	39 ppb	6/1/2015 – 7/8/2015	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Lead Copper samples taken every three years. Next Lead Copper sampling takes place in 2018.

*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 City of Milan 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 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 to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

**Copper is an essential nutrient, but some people who drink water containing copper in excess of the AL over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the AL over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

In March 2016, a water monitoring sample tested positive for bacteria. Per State Regulations, A re-sample of the location along with an upstream and downstream sample were collected and all three sample results were absent for bacteria. However, a sample of the source water was not collected within 24 hours of the positive sample causing the water system to receive a notice of violation from MDEQ. The source water was sampled in April and was absent of bacteria.

Your water comes from 4 groundwater wells, each between 80 to 100 feet deep. The State of Michigan performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very high" to "very low" based primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is "high." Information from this report can be obtained by contacting the Milan Water Department.

We are making efforts to protect our sources by the previous participation in a Wellhead Protection Program, in which the delineation of the area that provides water to our source has been identified. Continued participation in this program will further our efforts to identify and protect our sources. If you have additional questions or concerns, please call the Milan Water Department at 734-439-2408 or the Michigan Department of Environmental Quality at 517-780-7840.