

2006 CITY OF MILAN ANNUAL WATER QUALITY REPORT

This report explains where the City of Milan's drinking water comes from and the treatment it receives before it reaches your tap. The report also lists all of the contaminants detected in your water and an explanation of all violations in the past year.

Your drinking 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.

Drinking water, including bottled water, may be reasonably 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 the contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general populations. 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 the infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The source of Milan water is from groundwater wells. As water travels 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. These include:

- ◆ Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock and wildlife.
- ◆ Inorganic contaminants, such as salts and metals, which can be natural or may result from storm runoff, wastewater discharges, oil and gas production and farming.
- ◆ Organic chemicals, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also originate from gas stations, storm runoff and septic systems.
- ◆ Radioactive substances, which can be naturally occurring or be the result of oil and gas production and mining activities.
- ◆ Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

In order to ensure that tap water is safe, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

If you would like more information about your water, please call the Milan Water Department at 734-439-1780.

The Milan City Council meets at 7:30 p.m. on the second and fourth Monday of each month. Please feel free to come and participate. The City of Milan, Owen Diaz, Mayor, 147 Wabash Street, Milan, Michigan, 48160. Phone 734-439-1501.

WATER QUALITY DATA

Each year, the City is required to sample the drinking water for various contaminants. The table below lists all contaminants that were detected in 2006. The state allows us to monitor for certain contaminants less than annually because the concentrations of these contaminants are not expected to change frequently. The most recent results of these tests are also included in the table. There were sampling violations in 2006. The required number of monthly bacteriological samples were not collected in August, total trihalomethanes and haloacetic acids samples were collected as required, but from the incorrect sampling point in the system, and lead sampling showed lead levels above the action level. Additional sampling has or will take place as part of the City's monitoring program.

Terms and Abbreviations:

- **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 possible using the best available treatment technology.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected health risk.
- **Maximum residual disinfectant level (MRDL):** 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.
- **Maximum residual disinfectant level goal (MRDLG):** 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.
- **Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **N/A:** not applicable
- **ND:** not detected
- **ppb:** parts per billion or micrograms per liter. One part per billion can be equated to a single penny in \$10,000,000.
- **ppm:** parts per million or milligrams per liter. One part per million can be equated to a single penny in \$10,000.

Contaminant	MCL	MCLG	Milan Water	Range of Detections ¹	Sample Date	Violation	Typical Source of Contaminant
Inorganic Contaminants							
Sodium ² (ppm)	N/A	N/A	32	N/A	8/8/06	No	Erosion of natural deposits
Fluoride (ppm)	4	4	0.56	N/A	8/8/06	No	Erosion of natural deposits; water additive promoting strong teeth; discharge from fertilizer and aluminum factories
Monitoring Performed at the Consumers Tap							
Total Trihalomethanes (ppb)	80	N/A	53.0	N/A	7/26/05	No	By-product of drinking water chlorination
Chlorine (ppm)	MRDL = 4	MRDLG = 4	0.76	0.29 – 0.82	Monthly	No	Water additive used to control microbes
Lead and Copper Monitoring Results							
Lead (ppb)	AL = 15	0	16	Three sites were above the action level	9/27/06	Yes	Corrosion of household plumbing systems
Copper (ppb)	AL = 1300	1300	440	No sites were above the action level	9/27/06	No	Corrosion of household plumbing systems

Your water comes from 4 groundwater wells, each between 80 and 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 low” to “very high” 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 734-439-1780 or the Michigan Department of Environmental Quality at 517-780-7840.

¹ Lead and Copper results list the number of samples that exceeded the action level, rather than the range detected.

² Sodium is an unregulated contaminant and thus there is no MCL associated with it. Unregulated contaminant monitoring helps EPA to determine whether there is need to regulate those contaminants.