



Village of Milan Annual Water Quality Report

MILAN
IL1610400

Annual Water Quality Report for the period of
January 1 to December 31, 2009

This report is intended to provide you with important information about your drinking water and the efforts made by the MILAN water system to provide safe drinking water. The source of drinking water used by MILAN is Ground Water.

For more information regarding this report contact:

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Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 pickup 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.

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's Safe Drinking Water Hotline at (800) 426-4791.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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).

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. We cannot control the variety of materials used in plumbing components. When you 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 <http://www.epa.gov/safewater/lead>.

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We are pleased to submit our annual report by confirming that Milan's drinking water is safe and meets all state and federal EPA requirements. Our goal is always to provide you with a safe and dependable supply of drinking water. The Village Water Department has received notification from the Illinois Department of Public Health of a Fluoridation Award for 36 consecutive months of maintaining perfect compliance. The Department acknowledges "achieving the highest standard of compliance" in maintaining proper Fluoride levels in the drinking water. **Note:** During the assessment and maintenance of Well #4 we used water from Rock Island for a period of 45 days. Information concerning Rock Island's water quality is located at the end of this report.

If you have any questions regarding the content of this report or about the water utility, please call Kevin Farrell at the number listed above. To be informed of the policy decisions affecting the operation of the water utility, please monitor the Milan Village Board Agenda. Agendas are posted at the Milan Municipal Building at least 48 hours prior to each Village Board meeting. Meetings are conducted on the first and third Monday of each month at 5:30 p.m. at the Municipal Building at 405 East 1st Street.

Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more or view a summary version of the completed Source Water Assessments, you may access the IEPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>

A Source Water Assessment summary is included below for your convenience.

Milan has three Ground Water Public Supply wells. Well #3 (31860), Well #4 (31861) and Well #5 (01075) which produce 526,000 gallons per day on average to an estimated population of 5000. To determine Milan's susceptibility to groundwater contamination, information obtained during a Well Site Survey performed by the Illinois Rural Water Association on April 26, 1999 was reviewed. Based on this information, five potential sites of concern were identified within proximity of this water supply's wells. The Illinois EPA does not consider the city's source water susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells. In anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the water supply is not vulnerable to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic barrier exists that should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and a sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should minimize the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the vulnerability determination. Hence, well hydraulics were not evaluated for this groundwater supply. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Milan's wells. These minimum protection zones are regulated by the Illinois EPA. To further minimize the risk to the city's groundwater supply, the Illinois EPA recommends that three additional activities be assessed. First, the community may wish to enact a "maximum setback zone" ordinance. These ordinances are authorized by the Illinois Environmental Protection Act and allow county and municipal officials the opportunity to provide additional protection up to 1,000 feet from their wells. Second, the water supply staff may wish to revisit their contingency planning documents. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a water supply will minimize their risk of being without safe and adequate water. Finally, the water supply staff is encouraged to review their cross connection control program to ensure it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives provided by the community.

Milan 2009 Regulated Contaminants Detected (IL1610400)

Lead and Copper

Date Sampled: July 31, 2007

Definitions:

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

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

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	# Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper AL	Likely Source of Contamination
0	15 ppb	4 ppb	0	1.3 ppm	1.3 ppm	0.49 ppm	0	Lead: Corrosion of household plumbing systems; Erosion of natural deposits Copper: Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation. Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible 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 risk to health. MCLG's allow for a margin of safety. mg/l: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. ug/l: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. na: not applicable. Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples. Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Chlorine		4.4	0.58 – 4.4	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Total Trihalomethanes (THM)	7/2/07	0.62	0.62 – 0.62	No Goal	80	ppb	No	By-product of drinking water chlorination
Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future								
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Arsenic	1/15/08	2	0 - 2		10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	1/15/08	0.56	0.2 - 0.56	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	1/15/08	55	0 - 55	100	100	ppb	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride		1.1	1.1 – 1.1	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
Iron	1/15/08	0.2	0.11 – 0.2		1.0	ppm	No	Erosion from naturally occurring deposits
Manganese	1/15/08	38	14 - 38	150	150	ppb	No	Erosion from naturally occurring deposits
Nitrate (As Nitrogen)		0.14	0.049 – 0.14	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	1/15/08	8	1 - 8	50	50	ppb	No	Erosion of natural deposits
Sodium	1/15/08	260	29 - 260			ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration
Zinc	1/15/08	0.014	0.013 – 0.014	5	5	ppm	No	Discharge from petroleum and metal refineries; Erosion of natural deposits
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Beta/photon emitters	1/28/05	8.3	8.3 – 8.3	0	50	Mrem/yr	No	Decay of natural and manmade deposits
Combined Radium 226/228	1/27/09	3.8	3.8 – 3.8	0	5	pCi/L	No	Erosion of natural deposits
Gross Radium excluding radon and uranium	1/27/09	7.5	7.5 – 7.5	0	15	pCi/L	No	Erosion of natural deposits

Violations Table

E. coli	<p>Fecal Coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.</p> <p>Note: Well #4 had a Source Water violation of the Ground Water Standard. The well tested positive for fecal coliform, as a result of subsequent tests the well tested fine. However, due to the violation, the Village was required by the IEPA to perform a review of the construction details and susceptibility of contamination from outside sources for Well 4. The well pump was pulled and the casing was televised to check the integrity of the casing walls. There were no obvious breaches or leaks in the casing walls. The well was disinfected and put back into service. There have not been any positive tests during our monthly monitoring since the well assessment and rehab work was completed.</p>
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Village of Milan Annual Water Quality Report

The following information is being included as a result of Milan purchasing water from Rock Island while Well #4 was out of service for maintenance.

Rock Island 2009 Water Quality Information (IL1610650)

Regulated Contaminants

Regulated Contaminants								
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Barium		0.033	0.033 – 0.033	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride		0.9	0.89 – 0.89	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
Manganese		2	2 - 2	150	150	ppb	No	Erosion from naturally occurring deposits
Nitrate (As Nitrogen)		1	1.3 – 1.3	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium		23	23 - 23			ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration
Zinc		0.023	0.023 – 0.023	5	5	ppm	No	Discharge from petroleum and metal refineries; Erosion of natural deposits
Turbidity	Collection Date	Limit (Treatment Technique)	Level Detected		Violation		Likely Source Of Contaminant	
Highest Single Measurement		1 NTU	0.33		No		Soil Runoff	
Lowest Monthly % Meeting Limit		0.3 NTU	99.86%		No		Soil Runoff	
Total Organic Carbon: The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.								

