

North Maine Utilities

2008 Water Quality Report

For the period of January 1, thru December 31, 2008

Introduction:

During this past year the North Maine Utilities has met all the USEPA and Illinois state drinking water standards. This Water Quality Report is required by the Federal Environmental Protection Agency to be published yearly. It summarizes the quality of the water that was provided to you this past year. Included in this report are details about where your water comes from, what it contains, how it compares to standards that are set by regulatory agencies, and whom to contact if you have questions.

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

Water System Facts & Figures:

The Village of Glenview operates and maintains the North Maine Utilities water system. The North Maine Utilities water distribution system consists of over 54 miles of water main pipe, ranging in size from 3" to 20" in diameter. There are over 480 fire hydrants and more than 550 isolation valves in the system. The water system serves a population of over 35,000 people. A 750,000 gallon elevated storage tank supplies pressure and emergency fire flow reserve to the system. North Maine Utilities purchases all of its water from the Village of Niles. The Village of Niles purchases water from the City of Chicago. Lake Michigan is the sole source of water used to provide drinking water for Chicago and 123 suburban communities. Chicago utilizes Lake Michigan as its sole source of water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City and suburbs, while the South Water Purification Plant serves the southern areas of the City and suburbs.

Source Water Assessment:

The EPA considers all surface water sources of community water supply to be susceptible to potential pollution. The very nature of surface water allows contaminants to migrate into the intakes with little protection and only dilution. For this reason mandatory treatment for all surface water supplies is required. Chicago's offshore intakes are located at a distance that shoreline impacts are usually not considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather storm flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marina and shoreline point sources due to the influx of groundwater to the lake.

Drinking Water Source Information:

In order to ensure that tap water is safe to drink, the USEPA 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 must provide the same protection for public health.

The sources of drinking water (both tap water and bottled water) include rivers, streams, lakes, ponds, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and, in some cases, radioactive materials; and can pick up substances resulting from the presence of animals or from human activity.

Possible contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from septic systems, sewage treatment plants, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or from urban storm water runoff, industrial and domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticide 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 that can come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.

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 water poses a health risk. More information about contaminants can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice from their health care providers. USEPA/CDC has guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants. These guidelines are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

In addition to the informational section of this Water Quality Report, we have included for your review several tables. The tables will give you a better picture of the contaminants that were detected in your water and the contaminants that were tested for but not detected.

2008 North Maine Utilities Water Quality Data

Definitions:

MCLG: Maximum Contaminant Level Goal, or 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.

MCL: Maximum Contaminant Level, or 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.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

pCi/L: Picocuries per liter, used to measure radioactivity

Abbreviations:

nd - not detectable at testing limits.

n/a - not applicable

ppm - parts per million or milligram per liter.

ppb -parts per billion or micrograms per liter.

In most cases, the "**Level Found**" column represents an average of sample result data, collected during the calendar year. The "**Range of Detections**" column represents a range of individual sample results, from the lowest to the highest that were collected during the calendar year.

2008 North Maine Utilities Water Quality Data

Microbiological Contaminants

Coliform Bacteria	MCLG	MCL	Highest Level Found	Violation	Date	Likely Source of Contamination
Total Coliform Bacteria	0	5% of monthly samples are positive.	4.3	none	monthly	Naturally present in the environment.
Fecal Coliform and E. Coli	0	0	none	none	monthly	Naturally present in the environment.

Lead and Copper Definitions:

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. 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 line and home plumbing. We are responsible for providing high quality drinking water, but we 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 <http://www.epa.gov/safewater/lead>.

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

Lead and Copper	MCLG	AL	90th Percentile	Sites over AL	Violation	Likely Source of Contamination
Copper (ppm)	1.3	1.3	0	1	none	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead (ppb)	0	15	0	1	none	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Detected Contaminants

Disinfection/Disinfection By-Products	MCLG	MCL	Highest Level Found	Range Found	Violation	Likely Source of Contamination
Chloramines (ppm)	MRDLG = 4	MRDL = 4	1.33	0.22 – 1.33	none	Water additive used to control microbes.
Haloacetic Acids (ppb) (HAA5)	No goal for the total	60	16	10.44 – 14.9	none	By-product of drinking water chlorination.
Total Trihalomethanes (ppb) (TTHMs)	No goal for the total	80	30	16.15 – 40.06	none	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.

The following data is tabulated by the City of Chicago Department of Water management, and is information that is required to be included in this report.

2008 City of Chicago Water Quality Data Detected Contaminants

Microbial Contaminants

Contaminants	MCLG	MCL	Highest Level Found	Range of Detection	Violation	Likely Source of Contamination
Total Coliform Bacteria (% positive per month)	0	5%	0.76% in Sept.	n/a	none	Human and animal fecal waste.
Fecal Coliform and E. Coli (% positive per month)	0	0	3	n/a	none	Human and animal fecal waste.
Turbidity (% < 0.3 NTU)	n/a	TT/95%	100%	n/a	none	Soil runoff. Lowest monthly percent meeting limit.
Turbidity (NTU)	n/a	TT= 1 NTU max	0.14	n/a	none	Soil runoff. Highest single measurement.

Regulated Detected Contaminants

Inorganic Contaminants	MCLG	MCL	Highest Level Found	Range Found	Violation	Likely Source of Contamination
Barium (ppm)	2	2	0.0194	0.0191 – 0.0194	none	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate (as Nitrogen) (ppm)	10	10	0.320	0.304 – 0.320	none	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Total Nitrate & Nitrite (ppm)	10	10	0.320	0.304 – 0.320	none	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Disinfection/Disinfection By-Products (Stage 1)	MCLG	MCL	Highest Level Found	Range Found	Violation	Likely Source of Contamination
Haloacetic Acids (ppb) (HAA5)	n/a	60	9.000*	3.100 – 14.000	none	By-product of drinking water disinfection.
Total Trihalomethanes (ppb) (TTHMs)	n/a	80	19.500*	9.100 – 29.600	none	By-product of drinking water disinfection
*TTHMs and HAA5s are for the Chicago distribution system. Not all sample results were used for calculating the Highest Level Detected because some results include the IDSE study for future compliance that is included in the range of results. Initial Distribution System Evaluation Standard Monitoring Plan. Stage 2 DBPR promulgated on January 2006.						
Chlorine (ppm) (as Cl ₂)	4.0	4.0	0.74	0.63 – 0.74	none	Drinking water disinfectant
Total Organic Carbon (TOC)	The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.					

Unregulated Contaminants Detected

Contaminant (date of sample) (unit of measurement)	MCLG	MCL	Highest Level Found	Range Found	Violation	Likely Source of Contamination
Boron (ppb) sampled 01/29/2007	n/a	n/a	28.0	28.0 – 28.0	none	Erosion of naturally occurring deposits; Used in detergents and as a water softener; Used in production of glass, cosmetics, pesticides, fire retardants, and for leather tanning.
Sulfate (ppm)	n/a	n/a	28.900	27.700 – 28.900	none	Erosion of naturally occurring deposits.
Molybdenum (ppb) Sampled 01/29/2007	n/a	n/a	31.0	0 – 31.0	none	Erosion of naturally occurring deposits; Used in manufacture of special steels

State Regulated Contaminants

Contaminant (unit of measurement)	MCLG	MCL	Highest Level Found	Range Found	Violation	Likely Source of Contamination
Fluoride (ppm)	4	4	1.05	0.92 – 1.05	none	Water additive which promotes strong teeth.
Sodium (ppm)	n/a	n/a	8.85	8.13 – 8.85	none	Erosion of naturally occurring deposits; Used as water softener.

Radioactive Contaminants

Contaminant (unit of measurement)	MCLG	MCL	Highest Level Found	Range Found	Violation	Likely Source of Contamination
Beta / Photon Emitters (pCi/L)	0	5	1.38	1.300 – 1.380	none	Decay of natural and man-made deposits.
Gross Alpha	0	15	0.88	0.090 – 0.880	none	Decay of natural and man-made deposits.

Water Quality Data Table Footnotes

Fluoride

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l.

Sodium

There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium restricted diet, you should consult a physician about this level of sodium in the water.

Turbidity

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of Chicago's filtration system and disinfectants.

Unregulated Contaminants

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Chicago – 2008 Violation Summary Table

Contaminant or Program	Violation Type	Monitoring Period Start Date – End Date	Violation Explanation
Individual Filter Effluent Turbidity Monitoring	Minor Routine Monitoring (ISWTR/LT1)	12/1/2008 – 12/31/2008	Chicago failed to complete all the required tests of our drinking water for the contaminant and period indicated.
Health Effects (if applicable)	None		
Actions Taken by Chicago	<p>The South Water Purification Plant failed to complete all the required tests for individual Filter Effluent Turbidity for various times in less than a 24 hour period on December 28, 2008. This failure was in part due to a series of voltage drips caused by the local electrical utility.</p> <p>However, monitoring was manually performed regularly on the combined filter clearwells, as well as the finished water leaving the treatment plant via the outlets by Chicago's on-duty Water Chemists. These tests showed that Chicago remained within the USEPA parameters and guidelines and that there was no change in water quality during the time that the individual filter effluent turbidimeters were off-line.</p> <p>The Chicago Department of Water Management will provide additional training and purchase portable turbidity monitoring equipment</p>		

Who to Contact

If you know of anyone who receives North Maine Utility water service and did not receive this report, copies are available at the Village of Glenview Water Billing office, located at 1225 Waukegan Rd. Glenview, Ill. 60025. If you have any questions concerning this report or your water system please contact:

Jerry Burke, Director of Public Works
 Glenview Public Works Department
 1333 Shermer Road
 (847) 657-3030