

## Public Meetings

The Village of Mundelein Board meets twice monthly on the 2nd and 4th Mondays of each month at 7:00 p.m. at the Mundelein Fire Station Headquarters. Our Mayor is also a member of the Board of Directors of CLCJAWA, which meets on the fourth Wednesday of each month. The Village of Mundelein and CLCJAWA provide tours of their facilities. Staff members are also available for public speaking or for school visits. Please contact the Village of Mundelein or CLCJAWA for more information.



## Information Resources

If you have any questions about this report or the Village of Mundelein's Water Quality, please contact the Village of Mundelein Water Division at (847) 949-3273, or visit our web page at

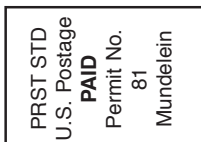
[www.mundelein.org](http://www.mundelein.org).

For specific information about CLCJAWA, contact them at (847) 295-7788 or visit their web page at [www.clcjawa.com](http://www.clcjawa.com).

- The Lake County Health Department may be contacted at (847) 360-6747.
- The USEPA Safe Drinking Water Hotline can be reached at 1-800-426-4791.
- The NSF Consumer Hotline can be contacted toll free at 1-877-867-3435 or visit their web page at [www.nsf.org](http://www.nsf.org).

## En Español

Este es un reporte importante sobre la calidad de su agua. Si usted no cuenta con alguien que pueda traducirle este reporte, llame al el Departamento de Agua de la Ciudad de Mundelein al (847) 949-3273 y con mucho gusto le asistiremos.



**ECRWSS**  
**Postal Customer**  
**Mundelein, IL 60060**

Village of Mundelein  
440 East Hawley  
Mundelein, IL 60060



# VILLAGE OF MUNDELEIN

## 2009 Water Quality Report



Reporting Year 2008

## Dear Water Customer,

This is your annual water quality report for the period of January 1, through December 31, 2008. Each year the Village of Mundelein issues this report to provide you information about the quality of our drinking water, the source of our water, how it is treated, and what it contains. These reports are issued in compliance with the requirements of the Safe Drinking Water Act. For specific information about our water's quality or any other water related question, contact Rob Haley at the Village of Mundelein Water Division at 847-949-3273 or Bill Soucie at CLCJAWA at 847-295-7788. Or, visit our website at [www.mundelein.org](http://www.mundelein.org) or the CLCJAWA website at [www.clcjawa.com](http://www.clcjawa.com).

## Who is the Village of Mundelein Water Division?

The Mundelein Water Division is one of six divisions within the Mundelein Public Works Department. This department has over 50 dedicated employees available 24 hours a day every day of the year to insure your drinking water is safe and to address other Public Works Department responsibilities. The Water Division, on a daily basis completes numerous customer service functions including but not limited to:

- Routine and Special Water Samples
- Water Service Transfers for new or final meter readings
- Residential Low Pressure and/or Water leak checks
- Replacement and/or New Meter Installations
- Emergency Water Shut-Offs for Broken Pipes
- Watermain Break and Water System Valve Repairs
- Fire Hydrant Flushing, Testing and Repairs
- Locating of Village maintained Watermain and Services



Water Division personnel completed over 16,322 work orders in 2008. Additionally, the Mundelein Public Works Department completed over 38,804 work orders in 2008.

## 2008 Water Facts

<b>Population served</b>	<b>30,935</b>
<b>Metered customers</b>	<b>10,476</b>
<b>Miles of watermain</b>	<b>123.5</b>
<b>Number of fire hydrants</b>	<b>1,792</b>
<b>Number of valves</b>	<b>1,771</b>
<b>Water storage:</b>	
<b>4 elevated water towers</b>	<b>3.25 million gallons</b>
<b>4 ground reservoirs</b>	<b>3.50 million gallons</b>
<b>TOTAL STORAGE</b>	<b>6.75 million gallons</b>
<b>Water production (average million gallons/day)</b>	<b>2.61 million gallons</b>
<b>2008 Highest usage – single day (9/1/08)</b>	<b>4.15 million gallons</b>
<b>Record highest usage – single day (6/23/05)</b>	<b>5.30 million gallons</b>

*Village of Mundelein Water Division is a member of the American Water Works Association, Illinois Section-American Water Works Association, North Suburban Water Works Association, and Illinois Potable Water Supply Operators Association.*

## Has Lake Michigan been assessed to determine how susceptible it is to potential contamination?

The Illinois EPA, using the Great Lakes Protocol, completed an assessment in April 2003. Lake Michigan is a surface water source and like all surface waters, is susceptible to potential contaminants. The very nature of surface water allows contaminants to migrate to the intake with no protection, only dilution. CLCJAWA's intake is ranked as moderately sensitive to potential contaminants. There are no potential contamination sources within the intakes critical assessment zone. However, the combination of land use, storm sewer outfalls, and the proximity of North Shore Sanitary District Pumping Stations in the immediate area add to the susceptibility of CLCJAWA's intake.

We are all participants in the water cycle. Our individual activities impact the rivers and lakes in our watershed and those into which our Wastewater Treatment Facilities discharge. Please properly use, store and dispose of all medications and household chemicals. Visit the Solid Waste Agency of Lake County website for disposal options and information at [www.swalco.org](http://www.swalco.org)

## Did you know?

- Water is the most common substance found on earth.
- Water covers three-quarters of the earth's surface.
- Of all the earth's water, only 1% is available as a source of drinking water
- Of the 1% that is available for drinking water, 20% is located in the Great Lakes.
- More than a third of the world's people lack a safe water supply.
- In underdeveloped areas, dysentery problems from poor water quality cause over 3.5 million deaths in children under the age of five every year.
- By 2025, more than two-thirds of the global population will live in countries with shortages of clean water.

## WATER IS LIFE PLEASE CONSERVE By Comparison!!

Gallon of Gasoline	=\$2.67
Gallon of Milk	=\$2.45
20 oz. Bottled Water	=\$1.00



Gallon of Mundelein Water = Less than \$.01 (delivered to your tap)

## What regulated compounds are found in our drinking water?

The table below lists all of the regulated compounds detected in our water. Each compound is regulated differently. The values shown in the Level Detected column are those used by the EPA to determine compliance with drinking water standards. This value may be a running average, a 90th percentile, or a maximum single value. Compounds listed with an \* were measured by the Village of Mundelein, all other compounds were measured by CLCJAWA.

Compound (Units)	Level Detected	Range of Levels	MCLG	MCL	Violation?	Sample Date	Primary Compound Source
Alpha Emitters (pCi/l)	2.6	Single Sample	0	5	No	11/12/08	Decay of natural deposits
Beta/Photon Emitters (pCi/l)	3.9	Single Sample	0	50	No	11/12/08	Decay of natural deposits
Bromate (ppb)	2	0 - 6.2	0	10	No	10/8/08	By-product of disinfection
Chlorine (ppm)*	1.2	0.2 - 1.2	< 4	4	No	Daily	Added for disinfection
Combined Radium 226/228 (pCi/l)	1.6	Single Sample	0	5	No	11/12/08	Decay of natural deposits
Fluoride (ppm)	1.1	0.9 - 1.1	4	4	No	10/8/08	Added for dental health
Sodium (ppm)	9.7	Single Sample	none	none	No	7/9/08	Erosion of natural deposits, runoff
Total Haloacetic acids (ppb)*	3.8	0 - 3.8	none	60	No	Quarterly	By-product of chlorine
Total Trihalomethanes (ppb)*	20	11.4 - 21.7	none	80	No	Quarterly	By-product of chlorine
Turbidity (% acceptable)	100%	100%	none	TT	No	12/31/08	Lake sediment, soil runoff
Turbidity (NTU)	0.10	0.03 - 0.10	none	5.0 TT	No	10/31/08	Lake sediment, soil runoff

Compound (Units)	Level Detected	# Sites Over Action Level	MCL	Action Level	Violation?	Sample Date	Primary Compound Source
Lead (ppb) *	0	0	0	15	No	06/08	Household plumbing corrosion
Copper (ppm) *	0.19	0	0	1.3	No	06/08	Household plumbing corrosion

Abbreviation	Definition
<b>Action Level</b>	Action Level is the level that triggers special treatment or other required actions by a water supply.
<b>MCL</b>	Maximum Contaminant Level is the highest allowed by EPA in drinking water.
<b>MCLG</b>	Maximum Contaminant Level Goal is the level of a contaminant below which there is no known or expected health risk.
<b>NTU</b>	Nephelometric Turbidity Units. Turbidity is a measure of water clarity.
<b>pCi/l</b>	pico Curies per liter. EPA considers 50 pCi/L to be a level of concern for beta particles.
<b>pos/month</b>	The maximum number of positive samples collected in a calendar month.
<b>ppb</b>	Parts-per-billion is also referred to as micrograms per liter (ug/L). Equivalent to one ounce in 7,350,000 gallons of water.
<b>ppm</b>	Parts-per-million is also referred to as milligrams per liter (mg/L). Equivalent to one ounce in 7,350 gallons of water.
<b>TT</b>	Treatment Technique refers to a required process intended to reduce contaminant level drinking in water.

## Where does our Water come from and how is it purified?

The Village of Mundelein purchases water from the Central Lake County Joint Action Water Agency (CLCJAWA). CLCJAWA is an intergovernmental cooperative formed by several communities including Mundelein to bring Lake Michigan Water to its customers.

Our water is pumped from Lake Michigan and is treated at CLCJAWA's Water Treatment Facility located in Lake Bluff.

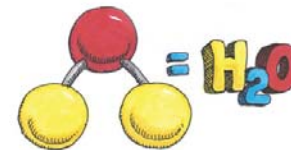
The enhanced water purification process used by CLCJAWA is unique. First, the water is treated with ozone to kill organisms and breakdown contaminants. Ozone is produced on-site from air, bubbled into the water, and then converted back into oxygen. The water is then mixed with a coagulant to remove sediment and other material from the water. Once clarified, the water is further refined as it passes through filters containing activated carbon and fine sand. Next, the water is treated with ultraviolet light to inactivate any remaining organisms. Furthermore, before the purified water leaves the CLCJAWA treatment facility, fluoride is added as a protective measure to help fight tooth decay. Phosphate, which is often used as a food additive is added in a small amount to protect the water from metal plumbing system's found in our homes. Finally, chlorine is added to protect against contaminants during the transmission of the water from the treatment facility all the way to your faucet.

CLCJAWA is a Four-Time Excellence in Water Treatment Award winning Facility. CLCJAWA was the third facility in the nation to achieve this distinction presented by the partnership for safe water. This voluntary water quality program, sponsored in part by the United States Environmental Protection Agency, holds its awardees to higher standards than required by current drinking water regulations.



## How is our water's quality assured?

Our tap water quality is consistently monitored by the Village, by the Illinois Environmental Protection Agency (IEPA), in the CLCJAWA Water Quality Lab, and by other independent labs. This aggressive water quality assurance program is thorough: bacteriological tests are conducted six times more often than required, water clarity is monitored every 10 seconds, and our water is checked for hundreds of non-regulated contaminants.



## How is our drinking water regulated?

To ensure tap water safety, the U.S. Environmental Protection Agency (USEPA) prescribes limits on the amount of certain contaminants in our drinking water. Water quality may be judged by comparing our drinking water to USEPA benchmarks for water quality. One such benchmark is the Maximum Contaminant Level Goal (MCLG). The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. This goal allows for a margin of safety. Another benchmark is the Maximum Contaminant Level (MCL). An MCL is the highest level of a contaminant that is allowed in drinking water. An MCL is set as close to an MCLG as feasible using the best available treatment technology.

## Where do water contaminants come from?

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 may be obtained by calling the US Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at 1-800-426-4791.

Both tap and bottled water come from rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring materials and can pick up substances resulting from the presence of animal or human activity. Contaminants that may be present in untreated water include:

- Microbial contaminants such as Viruses and Bacteria can be naturally occurring or may come from sewage treatment plants, septic systems, and livestock operations.

- Inorganic contaminants such as salts and metals can be naturally occurring or result from urban storm water runoff, wastewater discharges, oil and gas production, mining, or farming.

- Pesticides and herbicides come from sources such as agricultural and residential storm water runoff.

- Organic chemical contaminants including synthetic and volatile organic compounds are by-products of industrial processes and petroleum production but can also come from gas stations, urban storm water runoff and septic systems.

- Radioactive contaminants can be naturally occurring or be the result of oil, gas, and mining activities.

## Lead and Copper:

Some homes with old lead service lines, lead plumbing, or copper plumbing with lead solder, may have lead and copper in their water. To minimize these levels, the Illinois EPA requires that CLCJAWA add Phosphate to our water at a concentration of 0.3 ppm Orthophosphate. This commonly used food ingredient coats the inside of your household plumbing with a thin film. This film reduces lead and copper levels that may have otherwise leached from your plumbing into your water.

## Sodium:

There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers in case you are concerned about sodium intake due to dietary precautions. The level of sodium detected in our water is 9.7 ppm. If this level were greater than 20 ppm, and you were on a sodium restricted diet, you would be advised to consult a physician.

## Turbidity:

Turbidity is a measure of water clarity. Treatment facilities monitor turbidity because it is a good indicator of water quality and the effectiveness of their filtration and disinfection systems. At CLCJAWA turbidity is checked every ten seconds by automatic monitoring equipment and every four hours, by a technician in the Water Quality Lab.

## Immuno-Compromised Persons:

Some people may be more vulnerable to drinking water contaminants than the general population. Immuno-compromised persons such as those 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. The USEPA and Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA Safe Drinking Water Hotline at 1-800-426-4791.

## How does our Water System rate for Fire Protection?

The most recent evaluation conducted by the Insurance Services Office (ISO) was in 2001. ISO is the leading supplier of statistical, underwriting and actuarial information for the property/casualty Insurance Industry. Most insurance companies use the final results and classifications rating from this evaluation in underwriting and calculating premiums for properties within the Village of Mundelein.

The Village of Mundelein Water System attained a score of 39.10 out of a possible 40 points. This scoring placed our Water System into the highest classification available for Water Systems. The final overall scoring including the Fire Department's score, placed the Village of Mundelein's Fire Department in the top 2% of all Fire Departments and Water Systems rated in the United States.

If you are a Village of Mundelein Resident, Business owner, or Industrial Company, contact your Insurance provider to see if you are receiving the most favorable premium rate based on the Village of Mundelein's Class 3 ISO Rating.

