

Village of Matteson

Annual Water Quality Report

For the Period of January 1 to December 31, 2010

Consumer Confidence Report (CCR) - 2011

The Illinois EPA completed the Source Water Assessment Program for our supply. The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with water shed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of source water to contamination.

Source Water Location

The City of Chicago utilizes Lake Michigan as its source 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. Lake Michigan is the only Great Lake that is entirely contained within the United States. It borders Illinois, Indiana, Michigan, and Wisconsin, and is the second largest Great Lake by volume with 1,180 cubic miles of water and the third largest by area.

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather 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, marinas and shoreline point sources due to the influx of groundwater to the lake. Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at (312) 744-6635. 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 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 about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA'S Safe Drinking Water Hotline (1-800-426-4791).

- **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 may 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 may also come from gas stations, urban storm water runoff and septic systems; and
- **Radioactive contaminants**, which may be naturally occurring or be the result of oil and gas production and mining activities.

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.

Voluntary Testing

The Chicago Water Department of Water Management monitors for contaminants that are proposed to be regulated on for which no standards currently exist but which could provide useful information in assessing the quality of the source water or the drinking water.

Cryptosporidium - Analyses have been conducted monthly on the source water since April 1993. Cryptosporidium has not been detected in these samples. Treatment processes have been optimized to ensure that if there are Cryptosporidium cysts in the source water, they will be removed during the treatment process. By maintaining a low turbidity and thereby removing the particles from the water, the threat of Cryptosporidium organisms getting into the drinking water system is greatly reduced.

The Department of Water Management has added testing methods to those already performed to assess water quality. The objective of the additional testing is to detect changes in water quality in a timely manner. Protocol for screening water samples for presence of endospores has been developed.

Anthrax organisms belong to the group of bacteria, which can produce endospores. If samples are positive for the presence of endospores, further identification can be done to determine which bacteria are present. Samples are tested to develop a historical record of results and a database of information. No harmful bacteria have been identified.

-Definition of Terms-

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.*

Level Found: *This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.*

Range of Detections: *This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.*

Date of Sample: *If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.*

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

Treatment Technique (TT): *A required process intended to reduce the level of a contaminant in drinking water.*

nd: *Not detectable at testing limits.*

n/a: *Not applicable*

Avg: *Regulatory compliance with some MCLs are based on running annual average of monthly samples.*

Maximum residual disinfectant level or MRDG: *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 of 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.*

0316000 CHICAGO **DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT**

Annual Water Quality Report for the period of January 1 to December 31, 2010

This report is intended to provide you with important information about your drinking water and the efforts made by the MATTESON water system to provide safe drinking water. The source of drinking water used by MATTESON is Purchase Water. If you have questions:

Regarding water system, call:

Wanda Tippie
Administrative Assistant
708-748-1411

Regarding this report, call:

Public Works Superintendent
Bart Gilliam
708-748-1411

For questions about water billing and meter problems, call:

Denise Jensen
Water Department Billing
708-283-4790

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

Village Board Meetings are held on the first and third Monday of each month at 7:30 p.m. at the Village Hall, 4900 Village Commons, Matteson. In the event that the first or third Monday is a village recognized holiday the Board Meeting is held on Tuesday. To confirm that a meeting has not been cancelled or rescheduled, or if you wish to attend a meeting and require special accommodations, please contact the Village Clerk's Office, 708-283-4900, at least 36 hours in advance.

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 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 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.

Source Water Assessment

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

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather 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, marinas and shoreline point sources due to the influx of groundwater to the lake. Throughout history there have been extraordinary steps taken to assure a safe source of drinking water in the Chicagoland area. From the building of the offshore cribs and the introduction of interceptor sewers to the lock-and-dam system of Chicago's waterways and the city's Lakefront Zoning Ordinance. The city now looks to the recently created Department of the Water Management, Department of Environment and the MWRDGC to assure the safety of the city's water supply. Also, water supply officials from Chicago are active members of the West Shore Water Producers Association. Coordination of water quality situations (i.e., spills, tanker leaks, exotic species, etc) and general lake conditions are frequently discussed during the association's quarterly meetings. Also, Lake Michigan has a variety of organizations and associations that are currently working to either maintain or improve water quality. Finally, one of the best ways to ensure a safe source of drinking water is to develop a program designed to protect the source water against potential contamination on the local level. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of the watershed protection activities in this document are aimed at this purpose. Citizens should be aware that everyday activities in an urban setting might have a negative impact on their source water. Efforts should be made to improve awareness of storm water drains and their direct link to the lake within the identified local source water area. A proven best management practice (BMP) for this purpose has been the identification and stenciling of storm water drains within a watershed. Stenciling along with an educational component is necessary to keep the lake a safe and reliable source of drinking water.

Detected Contaminants

<i>Contaminant (unit of measurement) Typical Source of Contaminant</i>	<i>MCLG</i>	<i>MCL</i>	<i>Level Found</i>	<i>Range of Detections</i>	<i>Violation</i>	<i>Date of Sample</i>
<u>Microbial Contaminants</u>						
TOTAL COLIFORM Bacteria (1% pos/mo) Human and animal fecal waste.	0	5%	0.2%	n/a		
FECAL COLIFORM AND E.COLI (# Pos/mo) Human and animal fecal waste.	0	0	1	n/a		
TURBIDITY (<0.3 NTU) Soil runoff. Lowest monthly percent meeting limit.	n/a	TT	99.740%	98.740% - 100.000%		
TURBIDITY *NTU) Soil runoff. Highest single measurement.	n/a	TT=1NTUmax	0.38	n/a		
<u>Inorganic Contaminants</u>						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.0182	0.0175 - 0.0182		
NITRATE (AS NITROGEN) (PPM) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.311	0.288 - 0.311		
TOTAL NITRATE & NITRITE (ppm)	10	10	0.311	0.288 - 0.311		

<i>Disinfectants and Disinfection by-products</i>	<i>Collection Date</i>	<i>Highest Level Detected</i>	<i>Range of Levels Detected</i>	<i>MCLG</i>	<i>MCL</i>	<i>Units</i>	<i>Violation</i>	<i>Likely Source of Contamination</i>
Chlorine		0.8	0.5133 - 1.02	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5) *		17	12.86 - 19.82	No goal for the total	60	ppb	N	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.

Total Trihalomethanes (TTHm)*		37	29.1 - 40.6	No goal for the total	80	ppb	N	By-product of drinking water chlorination.
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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.

This year, as in years past, your tap water was tested according to USEPA and state drinking water health standards. The City of Chicago and the Village of Matteson vigilantly safeguards its water supply, and are working hard to continue providing the best water possible. If you have any questions about this report or concerning your water system, please contact the Public Works Department at 708-748-1411. We want our valued customers to be informed about their water quality.

2010 Non-Regulated Contaminants Detected

The following table identifies contaminants detected within the past five years. State and federal regulations do not require monitoring for these contaminants and no maximum contaminant level (MCL) has been established. These detections are for informational purposes only. No mandated health effects language exists. The CCR Rule does not required that this information be reported; however, it may be useful when evaluating possible sources of contamination or characterizing overall water quality.

<i>Contaminant (unit of measurement) Typical Source of Contaminant</i>	<i>Highest Level Detected</i>	<i>Range of Detections</i>	<i>Date of Sample</i>
<u>Additional Contaminants</u>			
BORON (ppb) 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.	28.0	28.0 - 28.0	01/29/2007
MOLYBDENUM (ppb) Erosion of naturally occurring deposits; Used in manufacture of special steels.	31.0	0 - 31.0	01/29/2007

2010 Regulated Contaminants Detected

Lead and Copper

Definitions:

Action Level (AL): The concentration of a contaminant which, if 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 lines 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://epa.gov/safewater/lead>.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is not known or expected risk to health. ALGs allow for a margin of safety.

<i>Lead and Copper</i>	<i>Date Sampled</i>	<i>MCLG</i>	<i>Action Level (AL)</i>	<i>90th Percentile</i>	<i># Sites Over AL</i>	<i>Units</i>	<i>Violation</i>	<i>Likely Source of Contamination</i>
Copper		1.3	1.3	0	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead		0	15	0	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

<i>Contaminant (unit of measurement) Typical Source of Contaminant</i>	<i>MCLG</i>	<i>MCL</i>	<i>Level Found</i>	<i>Range of Detections</i>	<i>Violation</i>	<i>Date of Sample</i>
<u>Disinfectants\Disinfection By-Products</u>						
TTHMS [total trihalomethanes] (PPB) By-product of drinking water disinfection.	n/a	80	20.000*	11.700 - 28.600		
HAA5 [HALOACETIC ACIDS] (ppb) By-product of drinking water disinfection.	n/a	60	10.000*	6.000 - 14.200		
*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 (as Cl ₂) (ppm) Drinking water disinfectant	4.0	4.0	0.80	0.0763 - 0.8189		
TOC [TOTAL ORGANIC CARBON] The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.						
<u>Unregulated Contaminants</u>						
SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	33.600	30.400 - 33.600		
<u>State Regulated Contaminants</u>						
FLUORIDE (ppm) Water additive which promotes strong teeth.	4	4	0.817	0.651 - 0.817		
SODIUM (ppm)	n/a	n/a	8.98	8.26 - 8.98		
<u>Radioactive Contaminants</u>						
COMBINED RADIUM (226/228) (pCi/L) Decay of natural and man-made deposits	0	5	1.38	1.300 - 1.380		3/17/2008
GROSS ALPHA excluding radon and uranium Decay of natural and man-made deposits.	0	15	0.88	0.090 - 0.880		3/17/2008

-Unit of Measurement-

ppm: Parts per million, or milligrams per liter - or one ounce in 7,350 gallons of water.

ppb: Parts per billion, or micrograms per liter - or one ounce in 7,350,000 gallons of water.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

%<0.3 NTU: Percent samples less than 0.3 NTU

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

Water Quality Data Table Footnotes

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 our 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.

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.

*Highest Running Annual Average Computed.

Lawn Sprinkling Regulations

Residents and business establishments are reminded that lawn sprinkling, for all customers of the village water system, is allowed only during the hours of 7:00 a.m. to 11:00 a.m. and 7:00 p.m. to 11:00 p.m.

During the period May 15 through September 15 of each year, it is unlawful for any person to use water for the sprinkling or irrigation of lawns or gardens except on an odd/even basis, based on the last digit of the street address. If the last digit of the street address is an even number lawn sprinkling is allowed on even numbered calendar days during the hours stated above. If the last digit of the street address is an odd number lawn sprinkling is allowed only on odd numbered calendar days during the hours stated above.

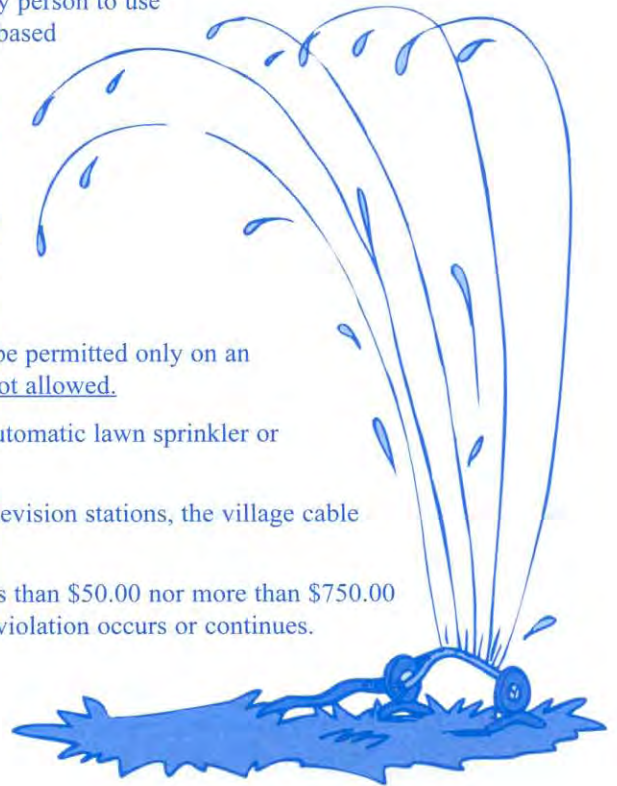
Under emergency conditions relative to the operational capacity of the water system, the demands placed on the system by users, and the risk of damage to or failure of the system, it is unlawful for any person to use water for sprinkling or irrigation of lawns except as set forth below:

Tier I (Conservation Emergency): Sprinkling or irrigation of lawns or gardens shall be permitted only on an odd/even basis between the hours of 7:00 a.m. and 11:00 a.m. The evening hours are not allowed.

Tier II (Total Ban): Sprinkling or irrigation of lawns or gardens (manually or by an automatic lawn sprinkler or irrigation system) is prohibited.

During emergency conditions notices will be distributed through the local radio and television stations, the village cable channel, newspapers and flyers posted in/or distributed throughout the community.

Persons violating the provisions of the lawn sprinkling ordinance shall be fined not less than \$50.00 nor more than \$750.00 for each offense and a separate offense shall be deemed committed on each day that a violation occurs or continues.



Village of Matteson
Department of Public Works
4900 Village Commons
Matteson, Illinois 60443

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