

# City of Oak Forest

## Annual Drinking Water Quality Report IL0312190

For the period of January 1 to December 31, 2010

### ***Water Supply:***

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

The City of Oak Forest purchased Chicago water from the Village of Oak Lawn. This water is received into our reservoirs and pumped to the City's local and retail customer base. The water is chlorinated and sampled to maintain the quality as required. We do not supplement or mix our water with any other sources.

For more information regarding this report, contact:

The Oak Forest Water Department  
(708) 535 – 4090

Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien

### ***Water Quality:***

The City of Chicago's South Water Purification Plant controls the water quality supplied to the City of Oak Forest. The City of Oak Forest provides additional chlorine as necessary to maintain the water quality as delivered to them. Information from the City of Chicago CCR is included in this report for review by the water consumers.

### ***City Testing:***

The City of Oak Forest tests the water supply for chlorine content on a daily basis to maintain the optimum levels for the consumer's needs. On a weekly basis, bacteriological samples are taken. Four times per year, samples are submitted for Total Trihalomethane (TTHM) and Haloacetic Acids (HAA5) Analysis. Samples are also provided for lead and copper monitoring on a schedule established by the IEPA. All testing and reports are performed according to the requirements of IEPA. The City of Chicago's 2010 Water Quality Data is included herein for your information.

### ***City Testing Summary:***

**Bacteriological samples:** No unsatisfactory samples were submitted.

- **Lead/Copper results:** 1 samples exceeding the 15 ppb/0 exceeding the 1.3 ppm Action Level  
90<sup>th</sup> Percentile – lead = 2.5 ppb/copper = 0.086 ppm

#### **Disinfection/Disinfection By - Products**

- **TTHM report:** No sample exceeding the 80 ppb MCL.  
Highest level detected – 25 ppb
- **HAA5 report:** No sample exceeding the 60 ppb MCL.  
Highest level detected – 11 ppb

## 2010 Water Quality Data

### **-Definition of Terms-**

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

**Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Maximum Residual Disinfection level Goal (MRDLG):** The level of drinking water disinfection below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfection level (MRDL):** The highest level of a drinking water disinfection allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Highest level Detected:** This column represents the highest single sample reading of a contaminant of all the samples collected in 2010.

**Range of Detections:** This column represents a range of individual samples 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.

### **Detected Contaminants.**

Contaminant (units)	MCLG	MCL	Level Detected	Range of detection	violation	Date of sample	Typical source of contamination
<b>Inorganic Contaminants</b>							
LEAD (ppb)	0	AL = 15	2.5 (90 <sup>th</sup> percentile)	1 exceeding AL	none	7/7/2008	Corrosion of household plumbing systems; Erosion of natural deposits. Leaching from wood preservatives
COPPER (ppb)	1.3	1.3	0.086 (90 <sup>th</sup> percentile)	0 exceeding AL	none	7/7/2008	Corrosion of household plumbing systems; Erosion of natural deposits.
<b>Disinfection/Disinfection By-Products</b>							
TTHMs[TOTAL TRIHALOMETHANES](ppb)	n/a	80	25 (Highest level)	12.4 – 35	none		By-product of drinking water chlorination.
HAA5[HALOACETIC ACIDS](ppb)	n/a	60	11 (Highest level)	4.7 – 22	none		By-product of drinking water chlorination.
CHLORINE (as Cl <sub>2</sub> ) (ppm)	4.0	4.0	0.8 (Highest value)	0.72 – 0.8	none		Water additive used to control microbes.

### **Sources of Drinking Water:**

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and 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 byproducts of industrial processes and petroleum production, and can 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.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration 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 (1-800-426-4791)

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 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>.

#### **Source Water Assessment Summary:**

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings (held on the second and fourth Tuesday of every month at 8:00P.M.). The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water plant operator at 708-687-4050. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA web site at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

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 Chicago land area. From the building of 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 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. 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.

**Educational Information:**

1. 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 (1-800-426-4791)
2. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).
3. The City of Oak Forest uses the following watering restrictions from May 15 to September 15. Sprinkling is to be done on an odd (address ends in an odd number) or even (address ends in an even number) basis from 7:00 AM until 11:00 AM and 7:00 PM to 11:00 PM. If more stringent restrictions become necessary notification will be given.

The following lawn care recommendations are supplied by the University of Minnesota:

- Water deeply and infrequently. One inch of water per week is ideal.
- Over-watering wastes your money and also removes plant nutrient from the soil.
- Excess watering can cause disease problems in your lawn.

**Violation Summary Table**

Violation Types

- MNR** Monitoring Violation (failure to monitor)
- MCL** Maximum Contaminant Level Violation (level found exceeded regulated standard)
- TTV** Treatment Technique Violation (failure to meet water treatment process)
- RPV** Reporting Violation (failure to submit results/required report by the deadline)
- \*\*\* State only violation (not a federal requirement)

**Violations for your system:**

Contaminant(s)	Type	Start Date	End Date
There were no violations for the 2010 year.			

# CITY OF CHICAGO

## CONSUMER CONFIDENCE REPORT Public Water Supply

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 watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination.

### **Source Water Location**

The City of Chicago utilizes Lake Michigan as its 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. 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 largest Great Lake by volume with 1,180 cubic miles of water and the third largest by area.

### **Susceptibility to Contamination**

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

### **Educational Information**

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 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 Safe Drinking Water Hotline (1-800-426-4791)

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive materials, pick up substances resulting from human activity or the presence of animals. The drinking water source is vulnerable to industrial waste and runoff from surrounding lands.

Possible contaminants consist of:

- 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 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, 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.

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. The City of Chicago Department of Water Management is responsible for providing high quality drinking water, but can not 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>.

Finally, in compliance with the provisions of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), the Chicago Department of Water Management had undertaken monthly source water monitoring for Cryptosporidium, Giardia, E. coli, and turbidity, a process that began in October 2006 and lasted for two years, ending in November 2008. The goal of LT2ESWTR is to require water systems, whose source water is susceptible to Cryptosporidium contamination to improve control of the pathogen. Monitoring performed in the two year period did not detect any Cryptosporidium or Giardia in source water samples collected.

### **2010 Voluntary Testing**

Since the end of the official monitoring period in November of 2008 of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), the City of Chicago has continued monitoring for Cryptosporidium, Giardia, and E. coli in its source water as part of its water quality program. To date , Cryptosporidium has not been detected in these samples, but Giardia was detected in 2010 in one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced.

### **City of Chicago Emerging Contaminant Study Analysis of Endocrine Disrupting Chemicals, Pharmaceuticals, and Personal Care Products**

The City of Chicago Department of water Management (CDWM) is proud to provide high quality water that exceeds all standards set by state and federal water quality regulators. Source water taken from Lake Michigan is filtered and treated at Chicago's two water purification plants: the Jardine Water Purification Plant (JWPP) and the South Water Purification Plant (SWPP). Having completed purification process, the finished (fully treated) drinking water is then distributed via pipelines to all CDWM's customers. The reader is encouraged to visit the Cit of Chicago website and read the annual water quality reports posted on the

CDWM's homepage.

The CDWM is currently performing a water quality study to monitor some compounds that have not historically been considered to be contaminants of concern, but have been recently documented at trace concentrations in our nation's water bodies. This study includes compounds known as Endocrine Disrupting Chemicals (EDCs) and Pharmaceuticals & Personal Care Products (PPCPs), which are considered to be emerging contaminants. EDCs are compounds with potential to interfere with natural hormone systems. PPCPs are a group of compounds consisting of prescription or over-the-counter therapeutic drugs, veterinary drugs, and consumer products such as sun-screen, lotions, insect repellent, and fragrances. The reader is encouraged to visit the United States Environmental Protection Agency (USEPA) website to learn more about EDCs (<http://www.epa.gov/ncer/science/endocrine>) and PPCPs (<http://www.epa.gov/pcpp/>).

Most of the compounds classified as EDCs and PPCPs are not currently regulated – in other words, drinking water concentration limits have not been set for these compounds and water quality regulators do not require that drinking water providers test for these compounds. At this time, human health effects have not been demonstrated at the trace levels at which these unregulated compounds are being detected. Nevertheless, more research is being conducted on the presence and impacts of EDCs and PPCPs in our nation's waters on human health (studies are being conducted by groups such as the USEPA and the Water Research Foundation).

Advances in technology over the past several years now allow for the detection of compounds at extremely low concentrations. Modern laboratory test can detect certain compounds down to levels of parts per trillion (ppt) or nanograms per liter (ng/L) concentrations. Typically, regulated compounds are measured in the range of parts per million (ppm) or milligrams per liter (mg/L). Since it is difficult to conceptualize a trillion of anything, the following example from The MegaPenny Project website (<http://www.kokogiak.com/megapenny/>) may help. It would take 2.6 trillion pennies to fill Willis Tower (formally known as the Sears Tower). One ppt (ng/L) would equal 2.5 pennies within a solid Willis Tower made entirely of pennies.

In response to the growing interest and awareness in EDCs and PPCPs, and recognizing that emerging contaminant research studies may take years to complete, the City of Chicago developed a sampling program that encompasses both temporal and laboratory variability. The sampling program entails collecting Lake Michigan source water and finished drinking water samples six times over two years. Sampling sites include the offshore crib intakes, shore intakes, and finished water outlets at the JWPP and SWPP, plus one field blank (42 total samples).

Since most of these compounds are not regulated, EDC and PPCP laboratory tests do not have standardized analyte lists, methods, or reporting limits. Therefore, CDWM decided to send samples to three independent laboratories with extensive experience doing EDC and PPCP analyses. This allows for the evaluation of intra-laboratory variability, inter-laboratory variability, and seasonal patterns and levels of occurrence of a large number of EDCs and PPCPs. The three laboratories each use different analytical methods, have overlapping analyte lists, and claim a range of ppt reporting limits. By sending samples to multiple laboratories, it is possible to comment on both lab performance and the actual occurrence patterns of EDCs and PPCPs.

CDWM completed the final sampling and is currently analyzing results for final reporting that will be posted on our website. A list of detected contaminants from the Study is posted on the City's website which can be accessed at the following address below:

[http://www.cityofchicago.org/city/en/depts/water/water\\_info/water\\_quality\\_resultsandreports/city\\_of\\_chicago\\_emergincontaminantstudy.html](http://www.cityofchicago.org/city/en/depts/water/water_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html)

Please address any questions or concerns to DWM's Water Quality division at 312 – 742 – 7499.

## 2010 Water Quality Data

### -Definition of Terms-

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

**Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Maximum Residual Disinfection level Goal (MRDLG):** The level of drinking water disinfection below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfection level (MRDL):** The highest level of a drinking water disinfection allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Highest level Detected:** This column represents the highest single sample reading of a contaminant of all the samples collected in 2009.

**Range of Detections:** This column represents a range of individual samples 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.

### Detected Contaminants

Contaminant (units of measurement) Typical Source of contaminant	MCLG	MCL	Highest level detected	Range of detections	Violation	Date of Sample
<b>Microbial Contaminants</b>						
TOTAL COLIFORM Bacteria (%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%	99.740% - 100.000%		
TURBIDITY (NTU) Soil Runoff. Highest single measurement.	n/a	TT=1NTUmax	0.638	n/a		
<b>Inorganic Contaminants</b>						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits:	2	2	0.0182	0.0175 - 0.0182		
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits.	1.3	AL=1.3	0.032 (90 <sup>th</sup> percentile)	0 sites exceeding AL		
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits.	0	AL= 15	6.07 (90 <sup>th</sup> percentile)	1 site exceeding AL		
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) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.311	0.288 – 0.311		
<b>Synthetic Organic Contaminants</b>						
<b>Including Pesticides and Herbicides</b>						
Di (2-ethylexyl) phthalate (ppb) Discharge from rubber and chemical factories	0	0	0.76	0.00 – 0.76		
<b>Disinfection/Disinfection By-Products</b>						
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 and Chlorine are for the City of Chicago distribution system. *Highest Running Annual Average Computed.						
CHLORINE (as Cl2) (ppm) Drinking water disinfectant	4.0	4.0	0.80	0.7063 – 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						

<i>Contaminant (units of measurement) Typical Source of contaminant</i>	<i>MCLG</i>	<i>MCL</i>	<i>Highest level detected</i>	<i>Range of detections</i>	<i>Violation</i>	<i>Date of Sample</i>
<b><u>Unregulated Contaminants</u></b>						
SULFATE(ppm) Erosion of naturally occurring deposits.	n/a	n/a	33.600	34.400 – 33.600		
SODIUM (ppm) Erosion of naturally occurring deposits; used as water softener.	n/a	n/a	8.98	8.26 – 8.98		
<b><u>State Regulated Contaminants</u></b>						
FLUORIDE (ppm) Water additive which promotes strong teeth.	4	4	0.817	0.651 – 0.817		
<b><u>Radioactive Contaminants</u></b>						
COMBINED RADIUM 226/228 (pCi/l) Decay of natural and man – made deposits	0	5	1.38	1.300 – 1.380		03-17-2008
GROSS ALPHA excluding radon and uranium (pCi/l) Decay of natural and man – made deposits	0	15	0.88	0.090 – 0.880		03-17-2008
<b><u>Unit of Measurement</u></b>						
ppm – Parts per million, or milligrams per liter						
ppb – Parts per billion or micrograms per liter						
NTU – Nephelometric Turbidity Units, used to measure cloudiness in drinking water						
%<0.5 NTU – Percent samples less than 0.5 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 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.

## **2010 Violation Summary Table**

<u>Violation Description:</u>	<u>Type</u>	<u>Start Date</u>	<u>End Date</u>	<u>Violation Explanation</u>
No drinking water quality violations were recorded during 2010				