



# VILLAGE OF VILLA PARK 2009 WATER QUALITY REPORT

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the period of January 1 to December 31, 2009. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Village of Villa Park is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water.

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

**We are proud to report that the water provided by the Village of Villa Park meets or exceeds established water-quality standards.**

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Village Board meetings occur on Mondays. Please contact Village Hall for scheduled dates. Find out more about the Village of Villa Park on the Internet at [www.invillapark.com]. 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 website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

## Water Source

The Village of Villa Park's source of drinking water is Lake Michigan. The lake water is treated at the City of Chicago Jardine Water Purification Plant. Since the quality of the raw water source is good, conventional treatment methods of disinfection, coagulation and sedimentation and sand filtration are adequate for producing water that is free of harmful contaminants. The water is purchased from the DuPage Water Commission and distributed to the residents of Villa Park. Each month water samples are collected from representative locations throughout the Village. The samples are delivered to an independent certified laboratory for microbiological analyses that include Total and Fecal Coliform Bacteria, and E.Coli Bacteria. None were detected in 200.

## An Explanation of the Water-Quality Data Table

The Chart in this report provides representative analytical results of water samples, collected from our system. Please note the following definitions:

**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.

**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.

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

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water. The data presented in this report is from the most recent testing done in accordance with regulations.

## Key to Table

AL = Action Level

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

TT = Treatment Technique

N/A = not applicable

ND= not detectable at testing limits

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

%<0.5 NTU = percent samples less than 0.5 NTU.

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (ug/l)

#pos/mo= number of positive samples per month

## Water-Quality Table Footnotes

### Turbidity (NTU)

Turbidity is a measure of 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.

### 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.

### 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 1.2mg/l.

**2009 WATER QUALITY DATA FOR THE CITY OF CHICAGO**

Contaminants (units)	Date Tested	MCLG	MCL	Highest Level Detected	Range	Major Source	Violation
<b>Microbial Contaminants</b>							
Turbidity (%<0.3 NTU)	2009	N/A	TT	98.900%	98.900%-100.000%	Soil runoff. Lowest monthly percent.	NO
Turbidity (NTU)	2009	N/A	TT=1NTUmax	0.68	N/A	Soil runoff. Highest single measurement.	NO
Total Coliform Bacteria (% pos/mo)	2009	0	5%	0.39% in August	N/A	Human and animal fecal waste.	NO
Fecal Coliform and E. Coli (# pos/mo)	2009	0	0	2	N/A	Human and animal fecal waste.	NO
<b>Inorganic Contaminants</b>							
Barium (ppm)	2009	2	2	0.0208	0.0201-0.0208	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	NO
Copper (ppm)	2009	1.3	AL=1.3	0.032 (90th percentile)	0 sites exceeding AL	Corrosion of household plumbing systems; Erosion of natural deposits.	NO
Lead (ppb)	2009	0	AL=15	6.07 (90th percentile)	1 site exceeding AL	Corrosion of household plumbing systems; Erosion of natural deposits.	NO
Nitrate (as Nitrogen) (ppm)	2009	10	10	0.384	0.381-0.384	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	NO
Nitrate & Nitrite (ppm)	2009	10	10	0.384	0.381-0.384	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	NO
<b>Unregulated Contaminants</b>							
Sulfate (ppm)	2009	N/A	N/A	29.200	26.000-29.200	Erosion of Naturally occurring deposits.	NO
<b>State Regulated Contaminants</b>							
Sodium (ppm)	2009	N/A	N/A	7.82	7.43-7.82	Erosion of Naturally occurring deposits; Used as water softener.	NO
Flouide (ppm)	2009	4	4	1.28	1.24-1.28	Water additive which promotes strong teeth.	NO
<b>Disinfectants/Disinfection By-Products</b>							
TTHMs (Total Trihalomethanes) (ppb)	2009	N/A	80	19.900*	11.100-22.700	By-product of drinking water disinfection.	NO
HAA5 (Haloacetic Acids) (ppb)	2009	N/A	60	8.940*	4.800-12.200	By-product of drinking water disinfection	NO
Chlorine (as Cl <sub>2</sub> ) (ppm)	2009	4.0	4.0	1.15	0.07-1.15	Drinking water disinfectant	NO
TOC [Total Organic Carbon]						The percentage of TOC removal measured each month and the system met all TOC requirements set by IEPA	NO
*TTHMs and HAA5s are for the Chicago distribution system. Highest Running Annual Average Computed.							
<b>Radioactive Contaminants</b>							
Combined Radium 226/228 (pCi/l)	3/17/08	0	5	1.38	1.300-1.380	Decay on natural and man-made deposits.	NO
Gross alpha excluding radon and uranium	3/17/08	0	15	0.88	0.090-0.880	Decay on natural and man-made deposits.	NO

**2009 VIOLATION SUMMARY TABLE FOR THE CITY OF CHICAGO**

No drinking water quality violations were recorded during 2009.

**2009 WATER QUALITY DATA FOR THE VILLAGE OF VILLAPARK**

	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Likely Source Of Contaminant
<b>Disinfectants &amp; Disinfection By-Products (Units)</b>							
<b>Total Haloacetic Acids (HAA5) ppb</b>	2009	7	0-10	No goal for the total	60	No	By-product of drinking water chlorination
<b>TTHMs [Total Trihalomethanes] ppb</b>	2009	35	17.9-37	No goal for the total	80	No	By-product of drinking water chlorination
<b>Chlorine (ppm)</b>	2009	0.9	0.3-0.9	MRDLG=4	MRDL=4	No	Water additive used to control microbes
<b>Inorganic Contaminants</b>							
<b>Barium (ppm)</b>	2/3/2005	.073	.073-.073	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Fluoride (ppm)</b>	2/3/2005	1	1-1	4	4.0	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Regulated Contaminants</b>							
<b>Iron (ppb)</b>	2/3/2005	.26	.26-.26	N/A	1.00	No	Erosion from naturally occurring deposits
<b>Manganese (ppb)</b>	2/3/2005	14	14-14	150	150	No	Erosion of naturally occurring deposits
<b>Sodium (ppm)</b>	2/3/2005	32	32-32	N/A	N/A	No	Erosion of naturally occurring deposits; used in water softener regeneration
<b>Zinc (ppm)</b>	2/3/2005	.007	.007-.007	5	5	No	Naturally occurring discharge from metal factories

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 litre or parts per million - or one ounce in 7,350 gallons of water. ug/l: micrograms per litre 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.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

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.

**LEAD AND COPPER DATA**

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	2008	0	15	4	0	ppb	No	Corrosion of household plumbing systems
Copper	2008	1.3	1.3	.038	.0	ppm	No	Erosion of natural deposits; leaching of household plumbing systems.

**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.

\*Highest Running Average computed quarterly

## **Required Additional Health Information**

In order to ensure that tap water is safe to drink, EPA prescribes limits on 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.

Drinking water, including bottled water, may reasonably be expected to contain at least small amount of some contaminants. The presence of contaminants does not necessarily indicate the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline (800-426-4791).

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

Some people may be more vulnerable to contaminants 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 (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>.

### **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 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, stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

## **CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT SOURCE WATER ASSESSMENT SUMMARY FOR THE 2009 CONSUMER CONFIDENCE REPORT (CCR)**

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 water via two water treatment plants. The Jardine Water Purification Plant serve 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 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.

If you have questions regarding the Village of Villa Park water system, or this report, please contact Rick Cermak, Superintendent at the Public Works Department at 630-835-8505.