Village of Niles
Annual Drinking Water Quality Report

Utility Number IL0312010

For the period of January 1 to December 31, 2003

This report is intended to provide you with important information about your dinking water and the efforts made by the Village of Niles water system to provide safe drinking water. The source of drinking water used by the Village of Niles is Lake Michigan and is purchased by Niles through the City of Chicago. For more information regarding this report, please contact Wally Kazakeich at (847) 588-7900. Este informe contiene informació muy importante sobre el aqua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

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 pickup substances resulting from the presences of animals or from human activity. 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 at (800) 426-4791.

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 may be naturally occurring or result from urban stormwater 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 stormwater 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 stormwater 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, 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.

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 at 1-800-426-4791.

Source Water Assessment

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 contamination. The Illinois EPA has completed the Source Water Assessment Program for our supply.

The Village of Niles utilizes Lake Michigan as its source water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City of Chicago and suburbs, while the South Water Purification Plant serves the southern areas of Chicago 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.

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 tern that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and 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.

Village of Niles

Regulated Contaminants Detected in 2003 (collected in 2003 unless noted)

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. Of Positive Total Coliform Samples in any month.	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples in 2002	Violation?	Likely Source of Contamination
0	5% of monthly samples are positive.	6	Fecal Coliform or E. Coli MCL: A routine sample is total coliform positive, and one is also fecal coliform or E. coli positive.	7	No	Naturally present in the environment.

Water Quality Test Results

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 suing 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 liter of parts per million – or one ounce in 7,350 gallons of water.
ug/l: micrograms per liter 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 (MRDLG): The level of disinfectant in drinking water below which there is no know or expected risk to health. MRDLG's allow for a margin of safety.

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.
Action Level Goal (AGL): 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.

Lead MCLG	Lead Action	Lead 90th Percentile	# Sites Over	Copper MCLG	Copper Action	Copper 90th	# Sites Over Copper AL	Likely Source Of Contaminants
0 ppb	15 ppb	5	0	1.3 ppm	1.3 ppm	0.1	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation?	Likely Source of Contaminant
Disinfectants & Disinfection By-Products							
Total Halocetic Acids (HAA5)	14	10.7-13.9	ppb		60*	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes]	39	14.9-38.9	ppb	n/a	80*	No	By-product of drinking water chlorination

*MCL Statement: The maximum contaminant level (MCL) for TTHM and HAA5 is 80 ppm and 60 ppm respectively and is currently only applicable to surface water supplies that serve 10,000 or more people. These MCLs will become effective 01/01/2004 for all groundwater supplies and surface supplies serving less than 10,000 people. Until 01/01/2004, surface water supplies serving less than 10,000 people, any size water supply that purchase from a surface water source, and groundwater supplies serving more than 10,000 people must meet a state imposed TTHM MCL of 100 ppm. Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their livers, kidneys, or central nervous systems, and may have increased risk of getting cancer.

Data Tabulated by the Chicago Department of Water

2003 Water Quality Data

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

Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Level found	Range of detections	Violation	Date of Sample
Microbial Contaminants						
TURBIDITY (%<0.3 NTU) Soil runoff. Lowest monthly percent meeting limit.	n/a	TT	100.000%	n/a		
TURBIDITY (NTU) Soil runoff.	n/a	TT=1NTUmax	0.250	n/a		
Inorganic Contaminants						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.020	0.019 - 0.020		
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.357	0.305 - 0.357		
NITRATE & NITRITE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.357	0.305 - 0.357		
Disinfectants\Disinfection By-Products						
TTHMs {TOTAL TRIHALOMETHANES} (ppb) By-product of drinking water disinfection	n/a	80.0	17.300	7.200 – 28.100		
HAA5 { HALOACETIC ACIDS] (ppb) By-product of drinking water disinfection	n/a	60	9.100	6.700 – 12.800		
CHLORINE (AS Cl2) (ppm) [Drinking water disinfectant]	4.0	4.0	0.66	0.54 – 0.80		
TOC [TOTAL ORGANIC CARBON] The percentage of Total Organic (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.						

Unregulated Contaminants

SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	17.200	15.600 - 17.200	

State Regulated Contaminants

FLUORIDE (ppm) Water additive which promotes strong teeth.	n/a	n/a	0.960	0.910 - 1.004	
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	n/a	n/a	7.000	6.900 - 7.000	

Radioactive Contaminants

BETA/PHOTON EMITTERS (pCi/l) Decay of natural and man-made deposits.	0	50	2.000	nd - 2.000	11/05/2001

Unit of Measurement

ppm - Parts per million, or milligrams per liter
ppb - Parts per billion, or micrograms per liter
NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
%<0.5 NTU - Percent samples less than 0.5 NTU
% pos/mo - Percent positive samples per month
MRDL – Maximum residual disinfectant level
MRDLG – Maximum residual disinfectant level goal

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.

Unregulated Contaminant Monitoring Regulation (UCMR)

The City of Chicago water system was required to monitor for the contaminants required under the Unregulated Contaminant Monitoring Rule (UCMR). All of 2003 UCMR results were non-detected. Inquiries and results may be obtained by calling the Chicago Water Quality Division office at (312) 744-7733.