



## WATER QUALITY REPORT

2018



### Village of Midlothian

As part of *The Safe Water Drinking Act* of 1996, municipalities are required to provide their residents with an annual **Consumer Confidence Report**. Attached is the Village of Midlothian's report. It summarizes the quality of water delivered to you during the 2018 calendar year. We hope you are satisfied with the quality and reliability of the drinking water you receive on a daily basis. It is something the public tends to take for granted, but rest assured we work very hard at it, every day of the year.

The Village of Midlothian purchases water from the City of Chicago, which uses Lake Michigan as its source. The following pages are water quality data sheets for both the Village and the City of Chicago. This information is given in an effort to keep our residents informed and educated. Some of the content is mandatory language and can be confusing but you should know the Village of Midlothian had no violations during 2018. If you have any questions feel free to call Joe Sparrey, Superintendent of Public Works at (708) 389-9658. Mr. Sparrey is also available at Village Board meetings, which are scheduled the second and fourth Wednesday of every month.

You should be aware that drinking water, **including** bottled water may reasonably be expected to contain small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information can be obtained by calling the **USEPA's Safe Drinking Water Hotline at 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 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). 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.

**The Village of Midlothian has complied with every standard set forth by USEPA and the State of Illinois.**

## Consumer Confidence Report

### Annual Drinking Water Quality Report

MIDLOTHIAN

IL0311920

Annual Water Quality Report for the period of January 1 to December 31, 2018

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by MIDLOTHIAN is Purchased Surface Water

For more information regarding this report contact:

Name Joseph Sparrey, Public Works Superintendent

Phone 708-389-9658

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

Source of Drinking Water	
<p>The sources of drinking water (both tap water 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 pick up substances resulting from the presence of animals or from human activity.</p>	
<p>Contaminants that may be present in source water include:</p> <ul style="list-style-type: none"><li>- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</li><li>- 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.</li><li>- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.</li><li>- 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.</li><li>- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.</li></ul>	
<p>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.</p> <p>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.</p> <p>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 at (800) 426-4791.</p> <p>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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.</p>	

#### Source Water Information

Source Water Name

CC 01-MASTER METER

FF IL 0310230 (MIDMARK)

Type of Water Location  
AT MAIN P.S.  
SW

04/16/2019 . IL0311920\_2018\_2019-04-16\_15-24-54.PDF

## Source Water Assessment

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. 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 the Village Hall or call the Public Works Department at 708-389-9658.** 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>.

Source of Water: **CITY OF CHICAGO**. 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.

2018      Regulated Contaminants Detected

**Lead and Copper**

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	08/04/2017	0	15	3.35	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

**Water Quality Test Results**

Definitions:

The following tables contain scientific terms and measures, some of which may require explanation.

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

Level 1 Assessment:

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment:

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level or 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 or 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 residual disinfectant level or MRDL:

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 or 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.

na:

not applicable.

mrem:

millirems per year (a measure of radiation absorbed by the body)

ppb:

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

ppm:

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

Treatment Technique or TT:

A required process intended to reduce the level of a contaminant in drinking water.

Water Quality Test Results

	Regulatory compliance with some MCLs							
	A Level 1 assessment is a study of the							
	A Level 2 assessment is a very							
	The highest level of a contaminant							
	The level of a contaminant in drinking water							
	The highest level of a disinfectant							
	The level of a drinking water disinfectant							
	not applicable.							
	millirems per year (a measure of							
	micrograms per liter or parts per billion -							
	milligrams per liter or parts per million -							
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2018	0.9	1.2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Halogenated Acids (HAA5)	2018	21	28.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	44	68	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

# 2018 Water Quality Data

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT  
0316000 CHICAGO

**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.

**Highest Level Detected:** This column represents the highest single sample reading of a contaminant of all the samples collected in 2018.

**Range of Detects:** 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.

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

**N/A:** Not applicable

Contaminant (unit of measurement) <i>Typical source of Contaminant</i>	DETECTED CONTAMINANTS					Violation	Date of Sample
	MCLG	MCL	Highest Level Detected	Range of Detects			
<b>Turbidity (NTU/Lowest Monthly % ≤ 0.3 NTU)</b> <i>Soil runoff</i>	N/A	TT(Limit: 95%≤0.3 NTU)	Lowest Monthly %: 100%	100% - 100%			
<b>Turbidity (NTU/Highest Single Measurement)</b> <i>Soil runoff</i>	N/A	TT(Limit 1 NTU)	0.19	N/A			
<b>Barium (ppm)</b> <i>Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits</i>	2	2	0.0214	0.0203 - 0.0214			
<b>Nitrate (as Nitrogen) (ppm)</b> <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>	10	10	0.42	0.31 - 0.42			
<b>Total Nitrate &amp; Nitrite (as Nitrogen) (ppm)</b> <i>Runoff from fertilizer use. Leaching from septic tanks, sewage; Erosion of natural deposits</i>	10	10	0.42	0.31 - 0.42			
<b>TOC</b>	<b>Total Organic Carbon (TOC)</b> The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by EPA.						
<b>Sulfate (ppm)</b> <i>Erosion of naturally occurring deposits</i>	N/A	N/A	27.6	26.3 - 27.6			
<b>Sodium (ppm)</b> <i>Erosion of naturally occurring deposits. Used as water softener</i>	N/A	N/A	8.89	8.14 - 8.89			
<b>Fluoride (ppm)</b> <i>Water additive which promotes strong teeth</i>	4	4	0.86	0.64 - 0.86			
<b>Combined Radium (226/228) (pCi/L)</b> <i>Decay of natural and man-made deposits.</i>	0	5	0.84	0.50 - 0.84		02-11-2014	
<b>Gross Alpha excluding radon and uranium (pCi/L)</b> <i>Decay of natural and man-made deposits.</i>	0	15	6.6	6.1 - 6.6		02-11-2014	

## Units 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

%≤0.3 NTU: Percent of samples less than or equal to 0.3 NTU

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

## 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 level of 0.7 mg/L with a range of 0.6 mg/L to 0.8 mg/L.

## SODIUM

There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who have concerns about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

## SOURCE WATER ASSESSMENT SUMMARY

### 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 third largest by area.

### Source Water Assessment Summary

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

### 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 of 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.

### 2018 VOLUNTARY MONITORING

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.

In 2018, CDWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources. Please address any questions or concerns to DWM's Water Quality Division at 312-742-7499. Data reports on the monitoring program for chromium-6 are posted on the City's website which can be accessed at the following address below:

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

For more information, please contact  
Andrea Putz, Deputy Commissioner, Water Quality - Bureau of Water Supply  
At 312-744-8190

Chicago Department of Water Management  
Bureau of Water Supply  
1000 East Ohio Street  
Chicago, IL 60611  
Attn: Andrea Putz

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by:  
The City of Chicago  
Department of Water Management  
Water System ID# IL0316000