# LEGAL NOTICE

## VILLAGE OF NORTH RIVERSIDE CONSUMER CONFIDENCE REPORT
## Public Water Supply For The Monitoring Year 2018

June, 2019

Dear North Riverside Water Customer:

The Consumer Confidence Report (CCR) rule requires all community water systems to provide reports to their customers on the quality of their drinking water. The Village of North Riverside, in conjunction with the City of Chicago and Illinois Environmental Protection Agency (IEPA), is providing the required information pertaining to source water monitoring for the period January 2018 through December 2018.

The Village of North Riverside has provided water that meets all the requirements of the United States Environmental Protection Agency and the Illinois Environmental Protection Agency (IEPA) drinking water standards. The following reports are being provided to help you better understand the quality of the water you consume and use on a daily basis. Consumers with medical conditions may use the water quality analysis provided or request a City of Chicago complete water analysis, to consult with their family doctors. Others may learn ways to better protect their children from the effects of lead in our environment, or how to conserve water in our daily lives. A well-informed consumer is the best ally the Village has in providing clean, safe water to its customers.

If there are any questions, or if additional information is needed, please contact Ed Durec, Water Operator, at (708) 762-5892.

Sincerely, Ed Durec
Water Superintendent

**Water Supply:**

The Village of North Riverside purchases Lake Michigan potable water from the City of Chicago via the Brookfield-North Riverside Water Commission. City of Chicago water treatment facilities chemically treat and filter the water from Lake Michigan. Once the Water Commission receives the potable water, the water is re-chlorinated to safeguard its quality. As a potable water supplier, the City of Chicago constantly monitors water quality and publishes laboratory results. Copies are public record and can be requested.

For more information, water quality reports can be obtained from the City of Chicago, the Brookfield-North Riverside Water Commission and the Water Department of the Village of North Riverside. Water Commission meetings are conducted every second Wednesday of each month at the Water Commission Offices located at 8636 Brookfield Avenue, Brookfield, Illinois 60513. Information can be obtained by contacting Ed Durec, Water Operator or Tim Kutt, Director of Public Works. Copies of this report will not be mailed to each customer but are available by telephoning the Water Department at (708) 762-5885.

**Water Quality:**

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.

**Village Testing:**

The Village of North Riverside tests the water supply for chlorine content on a daily basis to maintain the optimum levels for the consumers' needs. On a monthly basis, bacteriological samples are taken. On a yearly basis, samples are submitted for Total Trihalomethane (TTHM) 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. A copy of the IEPA Water Quality Report for the Village of North Riverside and City of Chicago are included later in this report.

**Violations:**

The Village of North Riverside Water Supply met all standards set by the EPA. No violations occurred during this period.

**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) In Order to ensure 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.
3) 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).
4) 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. Village of North Riverside is responsible for providing high quality drinking water, but 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.
5) The Village of North Riverside recommends their customers follow the water conservation recommendations of the IEPA on sprinkling restrictions and restrict sprinkling to the hours between 6:00 am to 12:00 noon and 4:00 pm to 10:00 pm during the period of May 15 to September 15.

**Sources of Contamination:**

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.

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 that 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.

**Turbidity – Regulated at the Water Treatment Plant – Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.**

| Turbidity | Limit (Treatment Technique) | Level Detected | Violation | Likely Source of Contamination |
|---|---|---|---|---|
| Highest Single Measurement | 1.0 NTU | 0.19 NTU | No | Soil Runoff. |
| Lowest Monthly % meeting limit | 0.3 NTU | 100% | No | Soil Runoff. |

**The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.**

**Chicago Regulated Contaminants Detected in 2018 (collected in 2018 unless noted)**

**Microbial Contaminants**

| Regulated | Highest No. of Positive | Total No. of Positive Samples | MCLG | MCL Total Coliform | Violation | Likely Source of Contaminants |
|---|---|---|---|---|---|---|
| Total Coliform Bacteria (% Pos/mo) | 0.4 | 0 | 0 | 5% | No | Naturally present in the environment. |

**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. AGL's allow for a margin of safety.

| Lead & Copper | Action Level (AL) | MCLG | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contaminant |
|---|---|---|---|---|---|---|---|
| Copper | 1.3 | 1.3 | 0.091 | 0 | ppm | No | Corrosion of household plumbing systems; Leaching from wood preservatives; Erosion of natural deposits. Collection date: 2018 |
| Lead | 15 | 0 | 9.1 | 0 | ppb | No | Corrosion of household plumbing systems; Erosion of natural deposits. Collection date: 2018 |

**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 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 MCL's 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.

| Regulated | Highest Level | Range of Levels | Unit of Measurement | MCLG | MCL | Violation | Likely Sources of Contaminants |
|---|---|---|---|---|---|---|---|
| **Disinfectants & Disinfection By-Products** | | | | | | | |
| **Inorganic Contaminants (Collection Date: 2018)** | | | | | | | |
| Sodium | 8.89 | 7.81-8.06 | ppm | NA | NA | NO | Erosion of naturally occurring deposits; used in water regeneration. Sampled 2018. |
| Barium | 0.02143 | 0.0203-0.0214 | ppm | 2 | 2 | NO | Discharge of drilling wastes; Discharge from refineries; Erosion of natural deposits. Sampled 2018. |
| Fluoride | 0.86 | 0.64-0.86 | ppm | 4 | 4 | NO | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from Fertilizer and aluminum factories. Sampled 2018. |
| Nitrate (As N) | 0.42 | 0.31-0.42 | ppm | 10 | 10 | NO | Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits. Sampled 2018. |

* 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 because some may be part of an evaluation to determine where compliance sampling should occur in the future.

**Unregulated Contaminant Monitoring**

**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.

| Regulated | Highest Level | Range of Levels | Unit of Measurement | MCLG | MCL | Violation | Likely Sources of Contaminants |
|---|---|---|---|---|---|---|---|
| **Disinfectants & Disinfection By-Products** | | | | | | | |
| Chlorine | 1.0 | 1.0-1.0 | ppm | MRDLG = 4 | MRDL = 4 | NO | Water additive to control microbes. Collection Date: 12/31/2018 |
| Total Haloacetic | 13 | 5.5-19.7 | ppb | No goal for total | 60 | NO | By-Product of drinking water chlorination. Collection date: 2018 |
| TTHM's (Total Trihalomethan | 26 | 11.4-36.7 | ppb | No goal for total | 80 | NO | By-Product of drinking water chlorination. Collection date: 2018 |

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.

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 because some may be part of an evaluation to determine where compliance sampling should occur in the future.

**Radioactive & Synthetic Organic Contaminants**

| Regulated | Highest Level | Range of Levels | Unit of Measurement | MCLG | MCL | Violation | Likely Sources of Contaminants |
|---|---|---|---|---|---|---|---|
| Combined Radium 226/228 | 0.84 | 0.50-0.84 | pCi/L | 0 | 5 | No | Erosion of natural deposits. Collection Date: 02/11/14 |
| Gross Alpha excluding radon & uranium | 6.6 | 6.1-6.6 | pCi/L | 0 | 15 | No | Erosion of natural deposits. Collection Date: 02/11/14 |

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 because some may be part of an evaluation to determine where compliance sampling should occur in the future.

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## Public Water Supply For The Monitoring Year 2018

### 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 (SW AP) to assist with watershed protection of public drinking water supplies. The SW AP 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 rea son 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 effecti ve barriers for removal ofCryptosporidium 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 . Also, in compliance with the Long Term 2 Enhanced Surface Water Treatment Rule (L T2ESWTR) Round 2, the City of Chicago has continued the 24 months long monitoring program (April 20 I 5 through April 20 I 7), collecting samples from its source water once per month to monitor for Cryptosporidium, Giardia, E. coli and turbidity, with no detections for Cryptosporidium and Giardia reported so far.

In 2017 , CDWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromi um-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

For more information, please contact
Alan Stark, Managing Deputy Commissioner for the Bureau of Water Supply
At 312-742-7499

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

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

**Violations Table**

| Violation Type | Violation Begin | Violation End | Violation Explanation |
|---|---|---|---|
| NONE | N/A | N/A | N/A |

The Village of North Riverside Water Supply is proud to report no violations occurred during the 2018 monitoring period.

**North Riverside Regulated Contaminants Detected in 2018 (collected in 2018 unless noted)**

**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. AGL's allow for a margin of safety.

| Lead & Copper | Date Sampled | MCLG | Action Level (AL) | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contaminant |
|---|---|---|---|---|---|---|---|---|
| Lead | 09/2016 | 0 | 15 | 6.1 | 0 | ppm | N | Corrosion of household plumbing systems; Erosion of natural deposits. |
| Copper | 09/2016 | 1.3 | 1.3 | 0.053 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |

**Water Quality Test Results**

**Maximum Contaminant Level Goal or MCLG:** The level of 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 or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set close to the MCLGs as feasible using the best available treatment technology.

**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.

**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.

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

**ppb:** 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.

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

**Regulated Contaminants**

| Disinfec-tants & Disinfection By-Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Sources of Contaminants |
|---|---|---|---|---|---|---|---|---|
| Chlorine | 12/31/2018 | 1 | 0.7-1 | MRDLG = 4 | MRDL = 4 | ppm | N | Water additive to control microbes. |
| Total Haloacetic | 2018 | 21 | 19.1-21 | No goal for the total | 60 | ppb | N | By-Product of drinking water chlorination. |
| TTHM's (Total Trihalome-than | 2018 | 36 | 33-36.1 | No goal for the total | 80 | ppb | N | By-Product of drinking water chlorination. |

## Brookfield-North Riverside Water Commission

**Regulated Contaminants Detected in 2018 (collected in 2018 unless noted)**

**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. AGL's allow for a margin of safety.

Rule or Contaminant

Violation Duration

Brookfield-North Riverside Water Commission Monitoring Year 2018

Violation Type

No Violations

Health Effects:

### Water Quality Test Results

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

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set close to the MCLGs as feasible using the best available treatment technology.

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

**mg/l or ppm:** milligrams per litre or parts per million or one ounce in 7,350 gallons of water.

**ug/1 or ppb:** 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 MCL's 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 marQin of safety.

| Disinfectants & Disinfection By-Products | Highest Level | Range of Levels | Units | MCLG | MCL | Violation | Likely Sources of Contaminants |
|---|---|---|---|---|---|---|---|
| Chlorine | 1.0 | 0.97-1.12 | ppm | MRDLG = 4 | MRDL = 4 | N | Water additive used to control microbes. Collection Date: 12/31/2018 |
| Total Haloacetic Acids (HAAS) | 29 | 28.9-29 | ppb | No goal for the total | 60 | N | By-Product of drinking water disinfection Collection Date: 2018 |
| TTHM's (Total Trihalomethan | 39.9 | 37-39.9 | ppb | No goal for the total | 80 | N | By-Product of drinking water disinfection Collection Date: 2018 |

**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.**