VILLAGE OF NORTH RIVERSIDE

CONSUMER CONFIDENCE REPORT
Public Water Supply
For The Monitoring Year 2014

June, 2015

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 2014 through December 2014.

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 testing of the Village of North Riverside water supply produced no violation for their facilities during the calendar year 2014.

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) 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).
3) 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 Hodgkins 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.

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.

North Riverside Regulated Contaminants Detected in 2013 (collected in 2013 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	MCLG	Action Level (AL)	90th Percentile	# of Sites Over AL	Units	Violations	Likely Source of Contaminant
Village of North Riverside							
Lead	0	15 ppb	2.2 ppb	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits. Collection Date: 9/4/2013

Regulated Disinfectants & Disinfection By-Products	Highest Level	Range of Levels	Units	MCLG	MCL	Violation	Municipality	Likely Source of Contaminants
Chlorine	0.8	0.6-1	ppm	MRDLG =4	MRDL =4	No	North Riverside	Water additive used to control microbes
Total Haloacetic Acids (HAA5)	5	4.7-4.9	ppb	na	60	No	North Riverside	By-Product of drinking water chlorination
TTHM's (Total Trihalomethanes)	27	24.3-27.33	ppb	na	80	No	North Riverside	By-Product of drinking water chlorination

* 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.

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.

2014 Violation Summary Table:

Rule or Contaminant	Violation Type	Violation Duration
Village of North Riverside	**No Violations**	**Monitoring Year 2014**

Health Effects:

Chicago Regulated Contaminants Detected in 2014 (collected in 2014 unless noted)

Microbial Contaminants

State Regulated Contaminants

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	0.046	0	ppm	No	Corrosion of household plumbing systems; Leaching from wood preservatives; Erosion of natural deposits.
Lead	15	0	6.6	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

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.

Sodium	10.0	9.5-10.0	ppm	na	na	No	Erosion of naturally occurring deposits; used in water softener regeneration.

There is no 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

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.

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Turbidity Highest Single Measurement	1.0 NTU	018 NTU	No	Soil Runoff. Lowest monthly percent metering limit
Turbidity Lowest Monthly % meeting limit	0.3 NTU	100%	No	Soil Runoff. Highest single measurement

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.

The Chicago water system was required to monitor for the contaminants required under the Unregulated Contaminant Monitoring Rule (UCMR). Results may be obtained by
calling the contact listed on the first page of this report.

Regulated	Highest No. of Positive	Total No. of Positive Samples	Unit or Measurement	MCLG	MCL	Violation	Likely Source of Contaminants
Total Coliform Bacteria (% Pos/mo)	0.6	0	%	0	5%	No	Naturally present in the environment.

Regulated	Highest Level	Range of Levels	Unit or 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
Total Haloacetic Acids (HAA5)	11	2.6-14.6	ppb	na	60*	No	By-Product of drinking water chlorination Highest running annual average. Quarterly
TTHM's (Total Trihalomethanes)	22	9.4-31.1	ppb	na	80*	No	By-Product of drinking water chlorination Highest running annual average. Quarterly
Inorganic Contaminants							
Combined Radium 226/228	0.84	0.50-0.84	pCi/L	0	5	No	Erosion of natural deposits. Collection Date: 2014
Gross Alpha excluding radon & uranium	6.6	6.1-6.6	pCi/L	0	15	No	Erosion of natural deposits. Collection Date: 2014
Barium	0.0227	0.0223-0.0227	ppm	2	2	No	Discharge of drilling wastes; Discharge from refineries; Erosion of natural deposits.
Fluoride	0.977	0.941-0.977	ppm	4	4.0	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge.
Nitrate (As N)	0.308	0.304-0.308	ppm	10	10	No	Runoff from fertilizer use; leaching form septic tanks, sewage; Erosion of natural deposits.

* 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.

2014 Violation Summary Table:

Rule or Contaminant	Violation Type	Violation Duration
CITY OF CHICAGO	**NO VIOLATIONS**	**MONITORING YEAR 2014**

Health Effects: **N/A**