VILLAGE OF NORTHFIELD
Annual Drinking Water Quality Report
for the Period January 1 to December 31, 2015

This report is intended to provide you with important information about your drinking water and the efforts made by the Villages of Northfield and Winnetka (the source of our drinking water) to provide safe, reliable drinking water.

For the period January 1 to December 31, 2015, we are pleased to report that the Village's drinking water met or exceeded State and Federal standards. The Village of Northfield is committed to providing safe, high quality drinking water. In conjunction with the Illinois Environmental Protection Agency (IEPA) and as required by the Safe Drinking Water Act, the Village is providing this annual water quality report which summarizes the quality of water provided last year. Reports are also available on our website, www.northfieldil.org, under *Northfield Newsletters*, Water Report. You can also get more information by calling the Safe Drinking Water Hotline, 1-800-426-4791.

Sources of Drinking Water

The source of drinking water used by Northfield is purchased from the Village of Winnetka whose source is the surface water of Lake Michigan. Recent lake water analyses show no evidence of contaminants that affect the quality of the water supplied to your home. 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).

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 by-products of industrial processes and petroleum production and can also 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 which limit the amount of certain contaminants in water provided by public water system. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Radon is a radioactive gas that occurs naturally in some ground water. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. Major sources of radon gas are soil and cigarettes. Inhalation of radon gas has been linked to lung cancer; however it is not clear how radon in your drinking water contributes to this health effect. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested, contact call 800-767-7236.

FDA regulations establish limits for contaminants in bottled water that 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. The United States Environmental Protection Agency (USEPA) and the Center for Disease Control (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).

While the Village of Northfield's most recent lead samples were all below detection limits, 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. The Village of Northfield 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.

If you have any questions regarding this report or the information contained in it, please contact Bill Wipperfurth in the Public Works Department, 847-441-3810. Additional concerns and comments may be heard at the regularly scheduled Village Board meetings on the 3rd Tuesday of each month at 7:00 p.m. at the Village Hall, 361 Happ Road. Call 847-446-9200 to confirm meeting dates and times.

Reading 2015 Water Quality Data

The tables on the following pages show the results of our water-quality analyses. Every regulated contaminant detected in our water, even in the minutest traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings and a key to units of measurement. Definitions of MCL and MCLG are important.

Definitions and Abbreviations

MCLG: Maximum Contaminant Level Goal, or 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.

MCL: Maximum Contaminant Level, or 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.

MRDL: Maximum Residual Disinfectant Level, or the highest level of drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level, or the level of a drinking water disinfectant below which there is no know or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Highest Level Detected: 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. *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.*

Range of Levels Detected: This column represents a range of individual sample results, from lowest to highest, that were collected during the CCR calendar year.

AL: Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
ALG: Action Level Goal, or 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
N/A - not applicable
Avg – Regulatory compliance with some MCLs are based on running annual average of monthly samples
ppm - parts per million, or milligrams per liter (mg/l)
ppb - parts per billion, or micrograms per liter (ug/l)
ppt - parts per trillion or nanograms per liter
ppq – parts per quadrillion, or pictograms per liter
pCi/l - picocuries per liter (measurement of radioactivity)

Village of Northfield Water Data - Regulated Contaminants Detected in 2015

Lead and Copper Year Sampled: 2014

Regulated Contaminate (units)	*MCLG*	*Action Level(AL)*	*90%*	*# Sites over Action Level*	*Violation*	*Date Sampled*	*Likely Source of Contaminant*
LEAD (ppb)	0	15	7.4	4	No	2014	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
COPPER(ppm)	1.3	1.3	0.26	0	No	2014	Corrosion of household plumbing systems; erosion of natural deposits;

Disinfectants & Disinfection By-Products Sampled: 2015

Regulated Contaminants/Collection Date	*Highest Level Detected*	*Range of Levels Detected*	*Unit of Measurement*	*MCLG*	*MCL*	*Violation*	*Likely Source of Contamination*
Chlorine 12/31/15	.6	.5 – .7	ppm	MRDLG = 4 MRDL = 4		No	Water additive used to control microbes
Haloacetic Acids (HAA5) 2015	8	7.6 – 7.98	ppb	No goal in the future	60	No	By-product of drinking water disinfection
Total Trihalomethanes TThm 2015	49	29.17 – 48.7	ppb	No goal in the future	80	No	By-product of drinking water disinfection

Violations for the Northfield system:

No violations affecting safe drinking water were recorded during this CCR reporting period.

The Village of Northfield is proud of its record of delivering high quality water and its compliance with EPA regulations. The Village will continue to work hard to protect the health of its residents and ensure a safe, reliable water supply.

The Village of Northfield purchases its water from the Village of Winnetka. In addition to our own water quality data above, the water quality report for Winnetka is provided below:

Inorganic Contaminants: 2015

Contaminants	*Highest Level Detected*	*Range of Levels Detected*	*Unit of Measurement*	*MCLG*	*MCL*	*Violation*	*Likely Source of Contamination*
Barium 2015	0.02	Not Applicable	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride 2015	1.0	Not Applicable	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; fertilizer discharge
Nitrate 2015	0.39	Not Applicable	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium 2015	7.3	Not Applicable	ppm	n/a	n/a	No	Erosion from naturally occurring deposits; used in water softener regeneration
Sulfate 2015	22	Not Applicable	ppm	250	n/a	No	Erosion from naturally occurring deposits

Disinfectants & Disinfection By-Products Sampled:

Regulated Contaminants/Date Sampled	*Highest Level Detected*	*Range of Levels Detected*	*Unit of Measurement*	*MCLG*	*MCL*	*Violation*	*Likely Source of Contamination*
Chlorine 12/31/15	.8	.7 – 1.0	ppm	MRDLG = 4 MRDL = 4		No	Water additive used to control microbes
Total Haloacetic Acids (HAA5) 2015	12	0 – 21.6	ppb	No goal in the future	60	No	By-product of drinking water contamination
TThm 2015 (Total Trihalomethanes)	27	15.142 – 38	ppb	No goal in the future	80	No	By-product of drinking water contamination

State Regulated Contaminants Date Sampled: 2015

Contaminants	*Highest Level Detected*	*Range of Levels Detected*	*Unit of Measurement*	*MCLG*	*MCL*	*Violation*	*Likely Source of Contamination*
Zinc	.011	Not Applicable	ppm	5	5	No	Erosion of naturally occurring deposits

Radioactive Contaminants Date Sampled: 1/06/14

Contaminants	*Highest Level Detected*	*Range of Levels Detected*	*Unit of Measurement*	*MCLG*	*MCL*	*Violation*	*Likely Source of Contamination*
Combined Radium	0.837	Not Applicable	pCi/L	0	5	No	Erosion of natural deposits

Lead and Copper Year Sampled: 2014

Regulated Contaminate (units)	*MCLG*	*Action Level(AL)*	*90%*	*# Sites over Action Level*	*Violation*	*Date Sampled*	*Likely Source of Contaminant*
LEAD (ppb)	0	15	4.2	0	No	2014	Corrosion of household plumbing systems; erosion of natural deposits.
COPPER(ppm)	1.3	1.3	0.452	0	No	2014	Corrosion of household plumbing systems; erosion of natural deposits;

Turbidity:

Limit Treatment Technique	*Lowest Monthly % Meeting Limit*	*Highest Single Measurement*	*Violation*	*Likely Source*
.03 NTU	100	Not Applicable	No	Soil runoff
1 NTU	Not Applicable	0.11	No	Soil runoff

Water Quality Data Table Footnotes

Turbidity (NTU) is a measure of the cloudiness of the water caused by suspended particles. The Village of Winnetka monitors this because it is a good indicator of water quality and the effectiveness of the filtration system and disinfectants.

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.

Sodium does not have a State or Federal MCL. Monitoring is required to provide information to consumers and health officials who are concerned about sodium intake due to dietary precautions. If on a sodium-restricted diet, consult a physician about the level of sodium in the water.

Total Organic Carbon (TOC) - The percentage of 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.

Unregulated Contaminants is 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 the USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

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 Board of Trustees meetings which meet the third Tuesday of the month. 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 Village Hall or call our water operator at (847) 441-3810. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendations 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.

Susceptibility is defined as the likelihood for the source water(s) of a public water system to be contaminated at concentrations that would pose a concern. The Illinois EPA considers all surface water sources of a 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, which is the reason for mandatory treatment for all surface water supplies in Illinois. Winnetka's primary intake (IEPA# 01299) is located far enough offshore that shoreline impacts are not considered a significant factor on water quality. However, the secondary intake (IEPA# 0109) is close enough to the share and may be influenced by potential sources including the boat launch located with the property of the Water Treatment Plant. In addition, the combination of the land use, storm sewer outfalls and the proximity to the North Shore Channel would add to the susceptibility of both intakes. Certain times of the year the potential for contamination exists due to wet-weather flows from the North Shore Channel. If the near shore currents are flowing in a northerly direction, contaminants from these flows could migrate to Winnetka's intakes and compromise water quality. However, it should be stressed that treatment employed by Winnetka's Water Treatment Plant is protective of their consumers, as noted by the facility's finished water quality history.